Overview

During the Fall of 2002, Mid-America Regional Council (MARC) conducted its Annual Air Quality Survey of residents in the metropolitan Kansas City area. The survey is part of an ongoing effort to measure the impact that air quality education efforts have had on the public's overall awareness and behavior. The Annual Air Quality Survey provides a benchmark for objectively evaluating the sustained impact of air quality education.

The survey was administered by mail with follow-ups by phone to a randomly selected sample of 646 Kansas City area residents. The overall results have a 95% level of confidence with a precision of at least +/- 4%. The distribution of respondents by county was as follows: 14% Wyandotte, 29% Johnson, 13% Clay, 8% Platte and 35% Jackson; 1% did not provide address information.

Findings

Generally, there were very few changes in the Annual Air Quality Survey results between 2001 and 2002. However, there was a significant increase in the number of persons who took action on Ozone Alert days in 2002. The results of the Ozone Alert day survey are provided in the last section of this report. Selected results from the Annual Survey are provided below.

- In 2002, 79% of those surveyed knew that air pollution levels in the Kansas City area usually exceed EPA standards on several days during the summer. In 2001, 81% of those surveyed knew this information.

- In 2002, 85% of those surveyed were very or somewhat concerned about the consequences of poor air quality in the Kansas City area. In 2001, 81% were very or somewhat concerned.

- In 2002, 57% of those surveyed thought that air quality in the Kansas City area is getting worse. In 2001, 53% thought it was getting worse.

- In 2002, 83% of those surveyed remembered hearing about an Ozone Alert day. There was no change from 2001.

- Seventy-five percent (75%) of those surveyed indicated that they had taken action on at least one Ozone Alert day during the summer of 2002 to help reduce air pollution; this was up significantly from 64% in 2001.

- 47% of those surveyed knew that Ozone Alerts refer to high levels of ozone in the air people breathe. One-third (33%) of those surveyed thought that Ozone Alerts refer to problems caused by a hole in the ozone layer of the atmosphere; 20% thought that Ozone Alerts refer to high mold/pollen counts.

- In 2002, 37% of the residents surveyed had heard or seen promotional materials about air quality in the Kansas City area. This was down slightly from 41% in 2001.

Year 2002

Annual Air Quality Survey Results

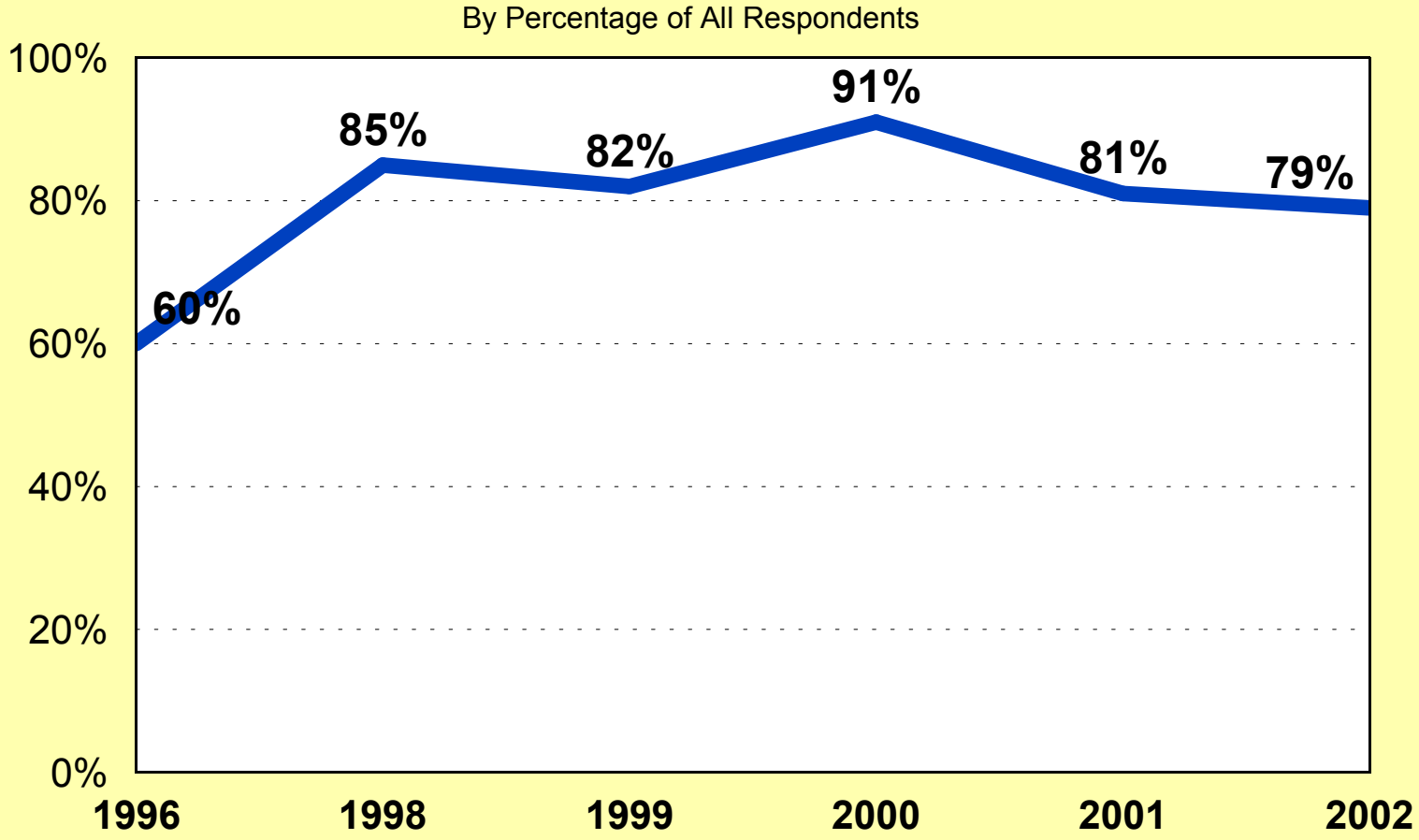
Conducted for
Mid America Regional Council

by
ETC Institute

Methodology

- Survey has been conducted annually since 1998; the first survey was conducted in 1996
- Administered to a random sample of households in the five-county metropolitan area
- Results have a 95% level of confidence with a precision of at least +/-4%
- Ozone Alert Day Surveys Conducted on July 9, July 30, and September 6

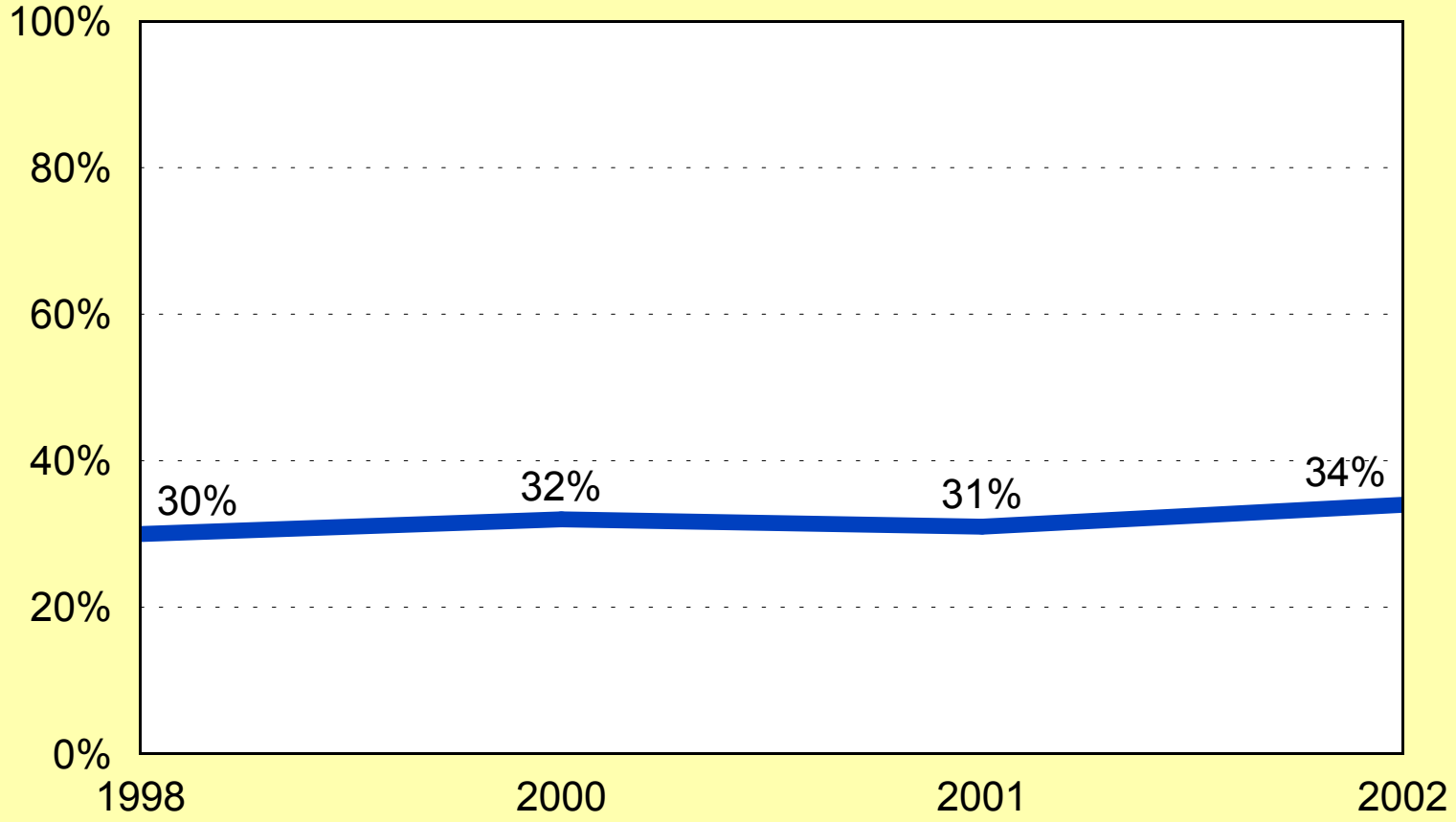
Q1: Percentage of Residents Who Know Air Pollution Levels in the Kansas City Area Usually Exceed EPA Standards on Several Days During the Summer



Sources: ETC Institute Surveys (Spring 1996, Fall 1998,Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q2: Percentage of Households in the Kansas City Area that Have at Least One Person Who Has Breathing or Respiratory Problems

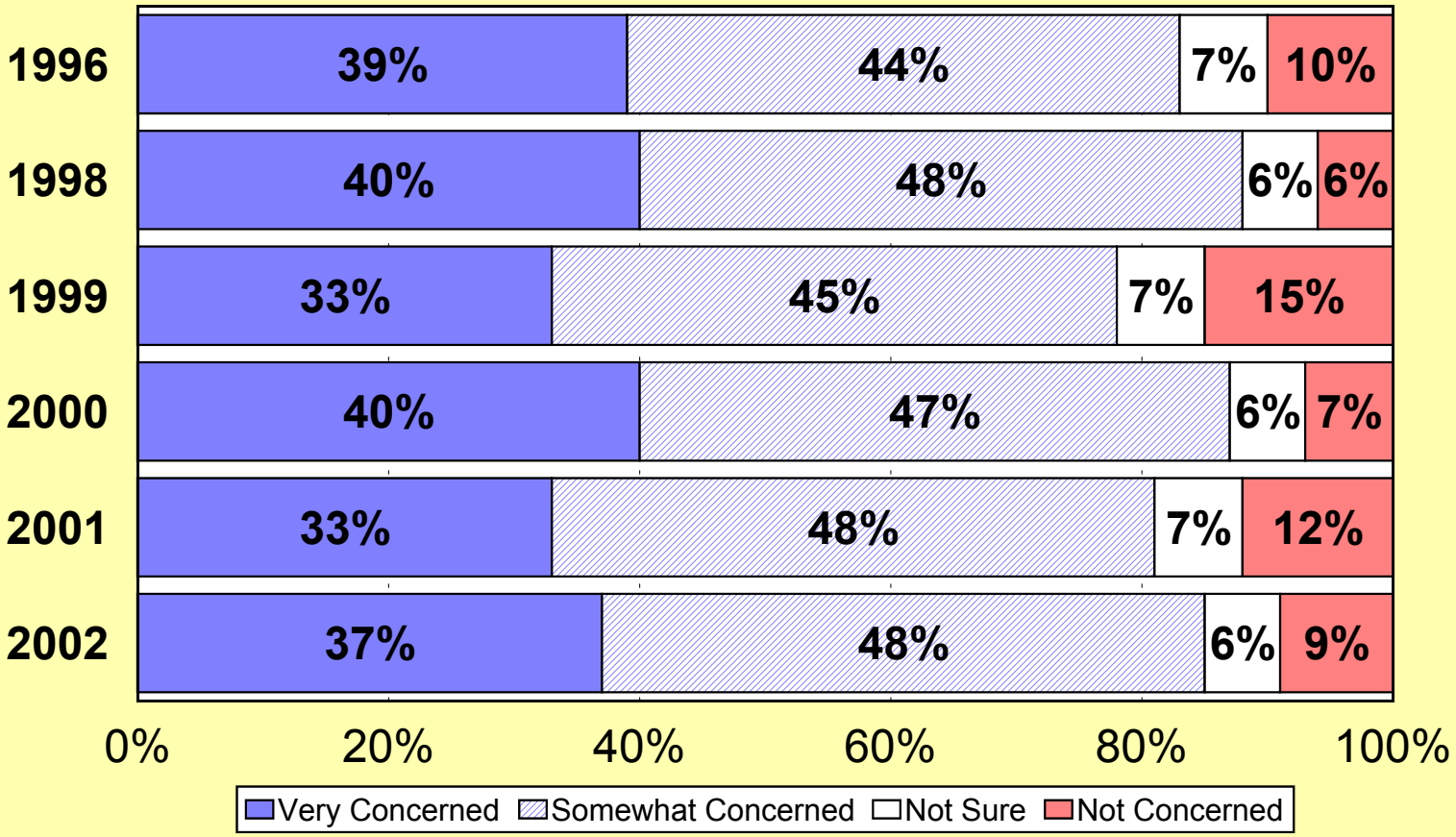
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 1998, Fall 2000, Fall 2001, Fall 2002)

Q3: How Concerned Residents Are About the Health Consequences of Poor Air Quality in the Kansas City Area

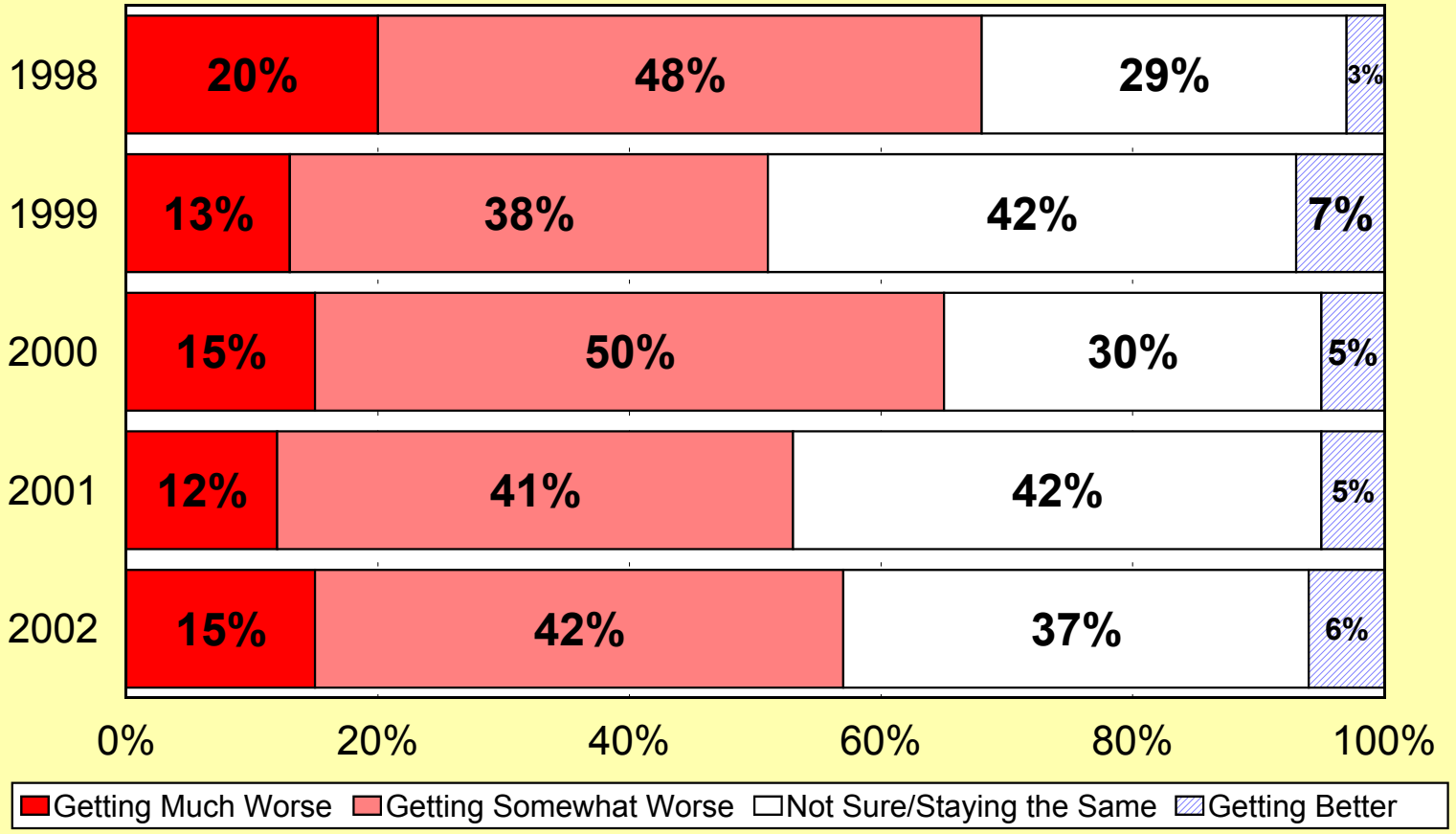
By Percentage of All Respondents



Sources: ETC Institute Surveys (Spring 1996, Fall 1998,Fall 1999, Fall 2000, Fall 2001, Fall 2002)

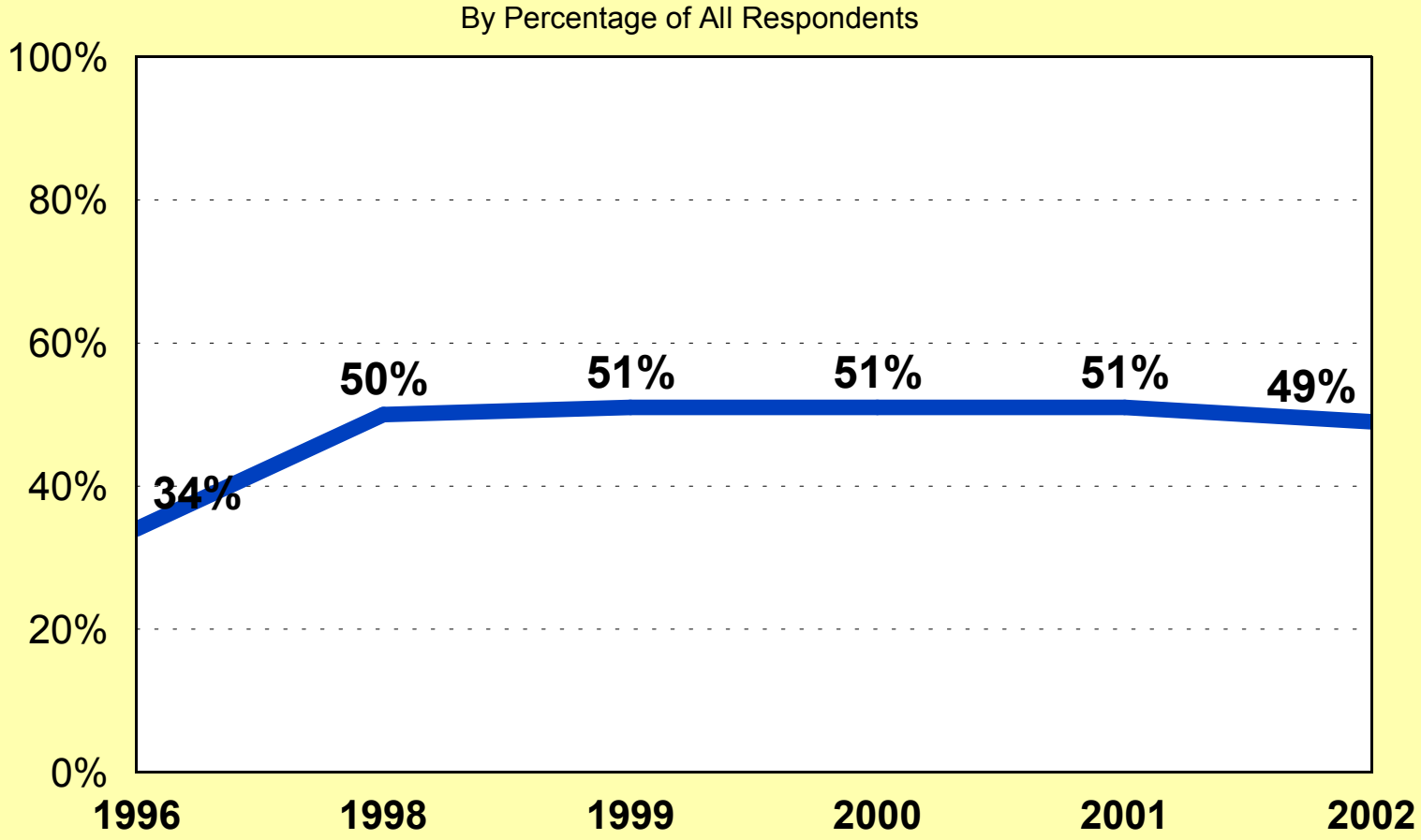
Q4: How Residents Think Air Quality in the Kansas City Area Is Changing

By Percentage of All Respondents



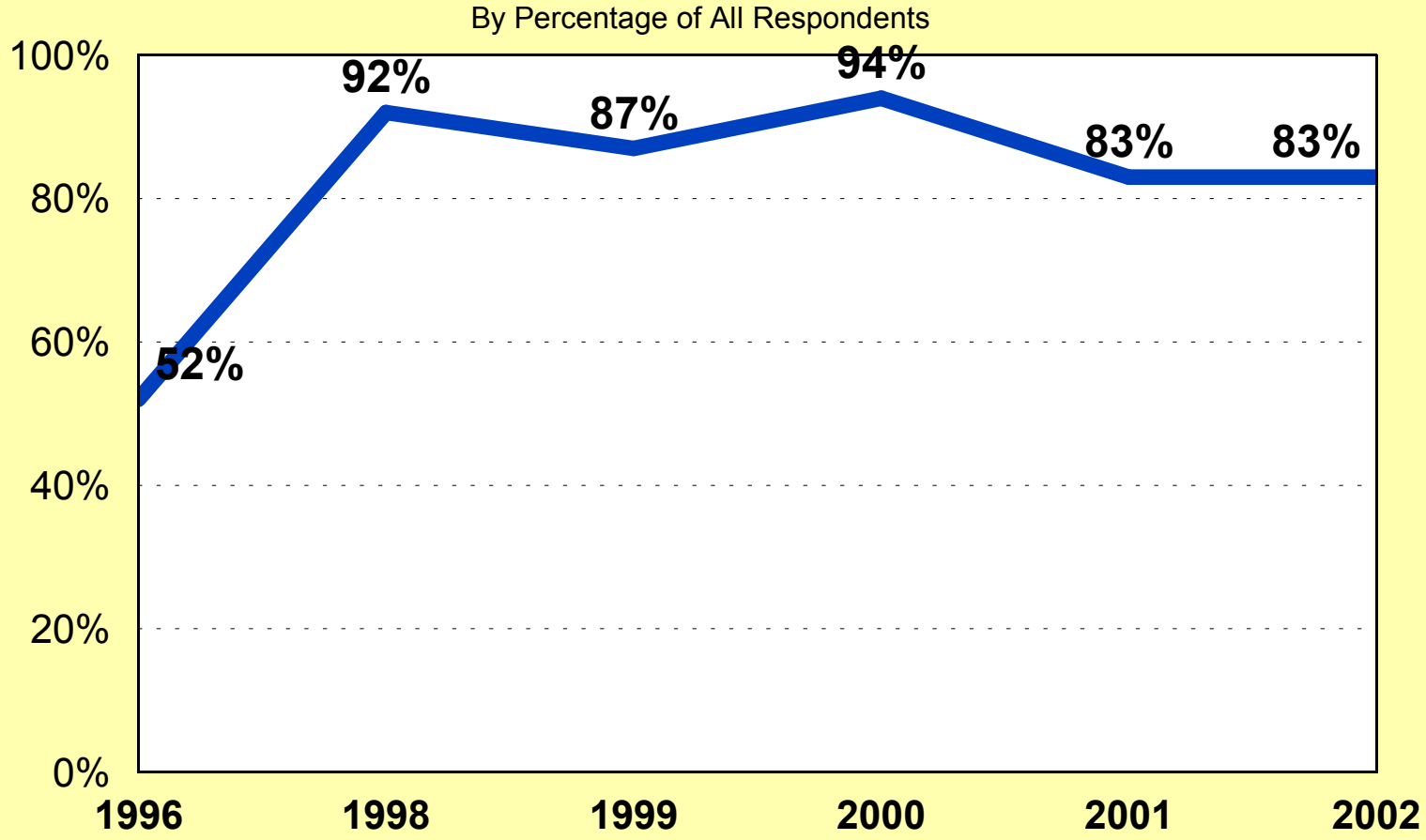
Sources: ETC Institute Surveys (Fall 1998,Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q5: Percentage of Residents Who Think They Can Do Something to Help Improve Air Quality in the Kansas City Area



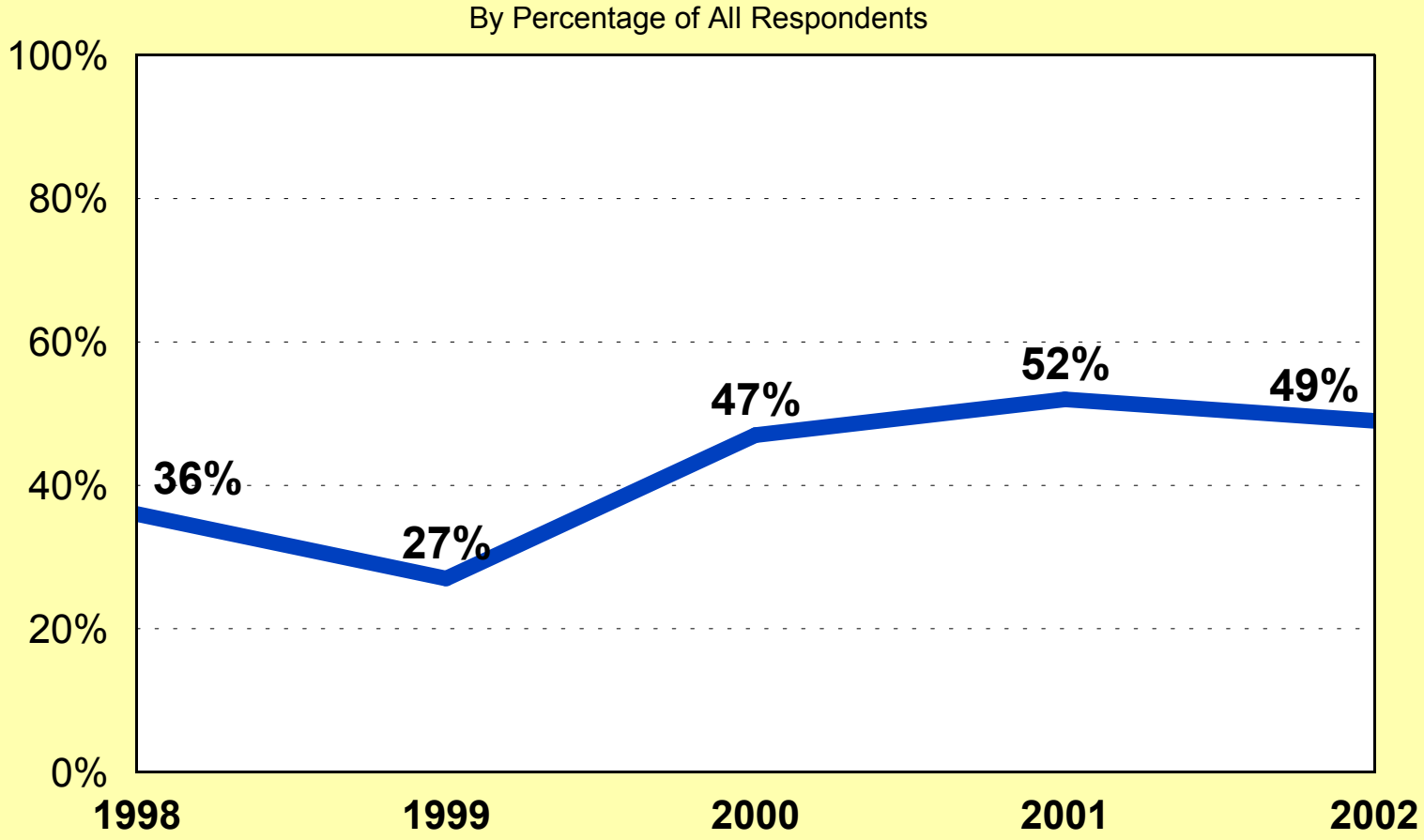
Sources: ETC Institute Surveys (Spring 1996, Fall 1998,Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q6: Percentage of Residents Who Remembered Hearing About OZONE (RED) ALERT Days During the Previous Summer



Sources: ETC Institute Surveys (Spring 1996, Fall 1998,Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q7: Percentage of Residents Who Knew the Actual Meaning of an "Ozone Alert Day"

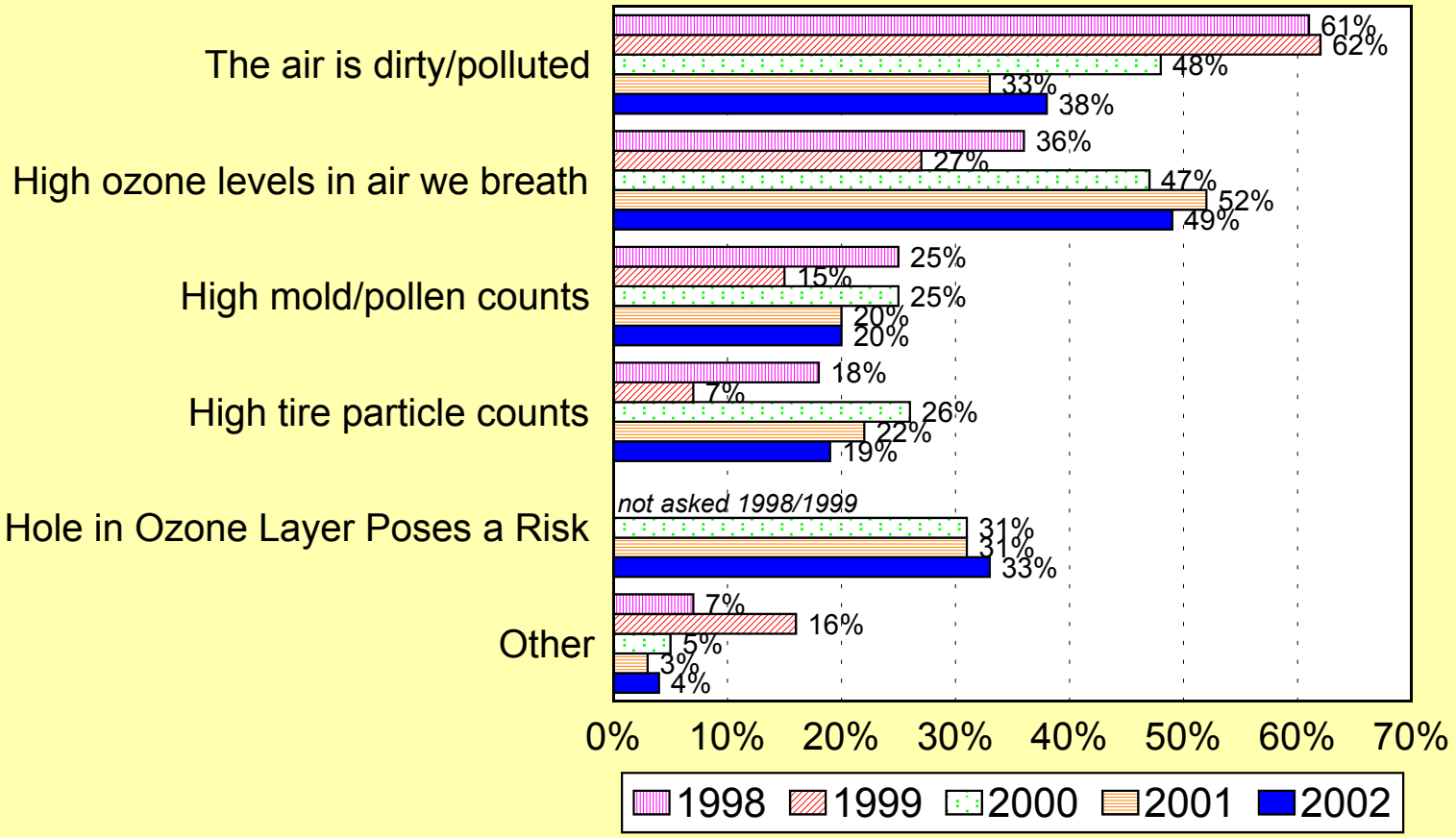


Sources: ETC Institute Surveys (Fall 1998,Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q7: What Kansas City Area Residents Think An OZONE (RED) ALERT Day Means

By Percentage of All Respondents

(Percentage exceeds 100% because some respondents gave more than one response)

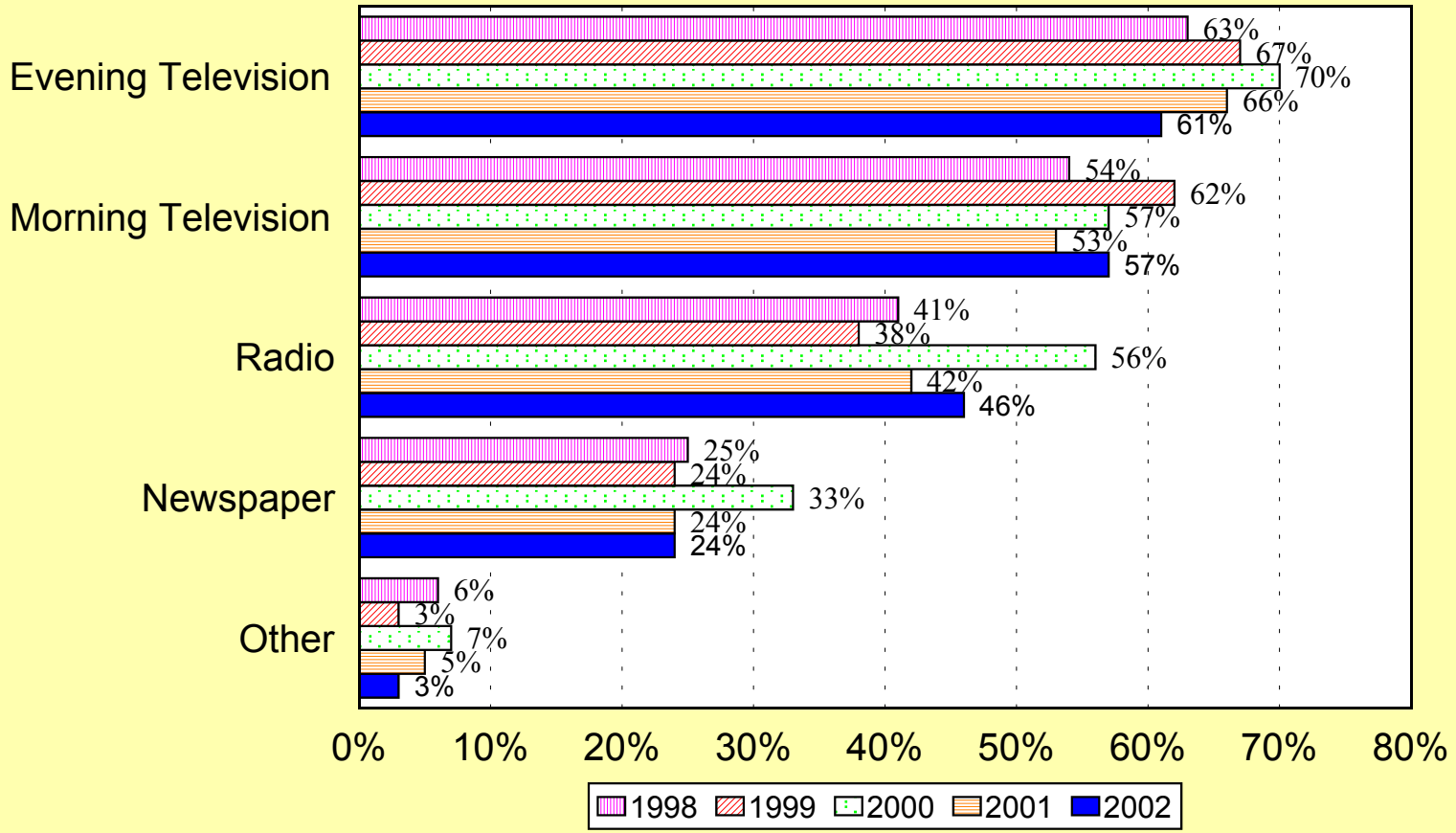


Sources: ETC Institute Surveys (Fall 1998,Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q8: Where Residents Have Seen or Heard the Phrase OZONE (RED) ALERT Used to Describe Poor Air Quality in the Kansas City Area

By Percentage of Respondents

(Percentage exceeds 100% because some respondents gave more than one response)

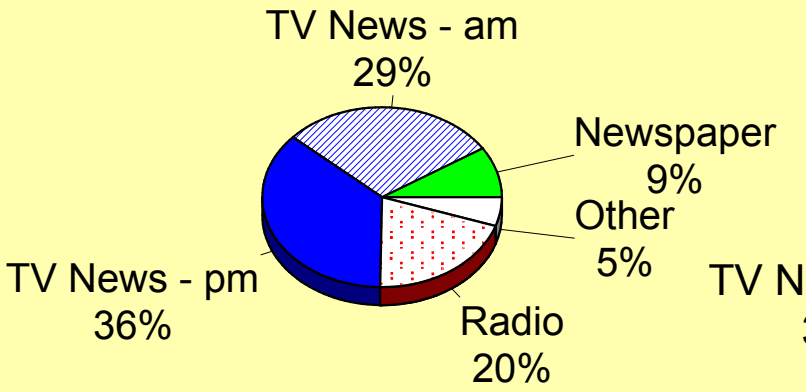


Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001, Fall 2002)

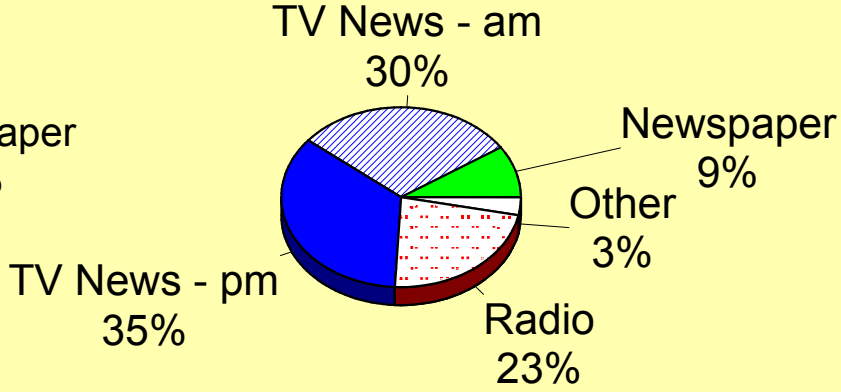
Q8a: Where Residents Get Information About Ozone Alert Days Most Often

By Percentage of Respondents

2001

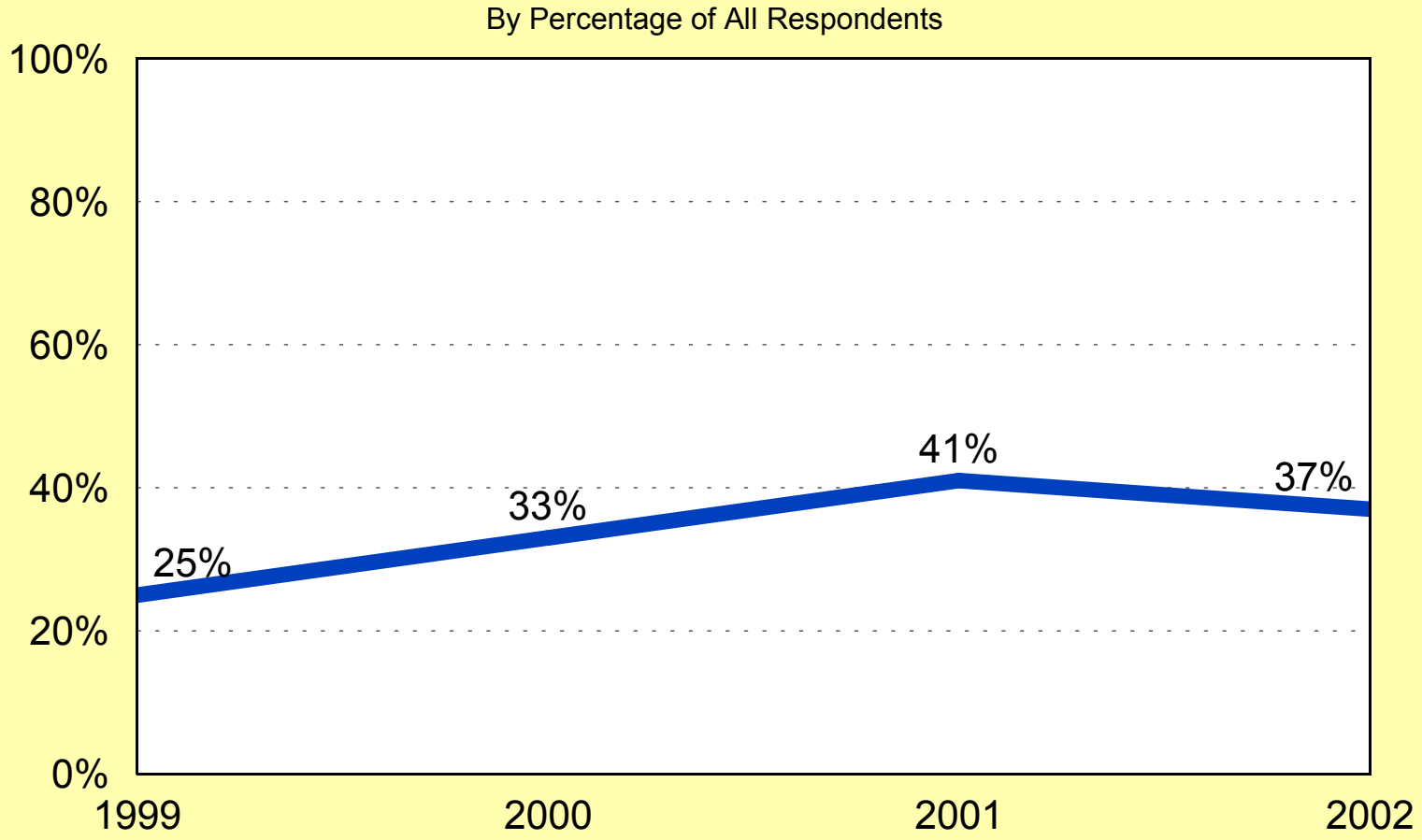


2002



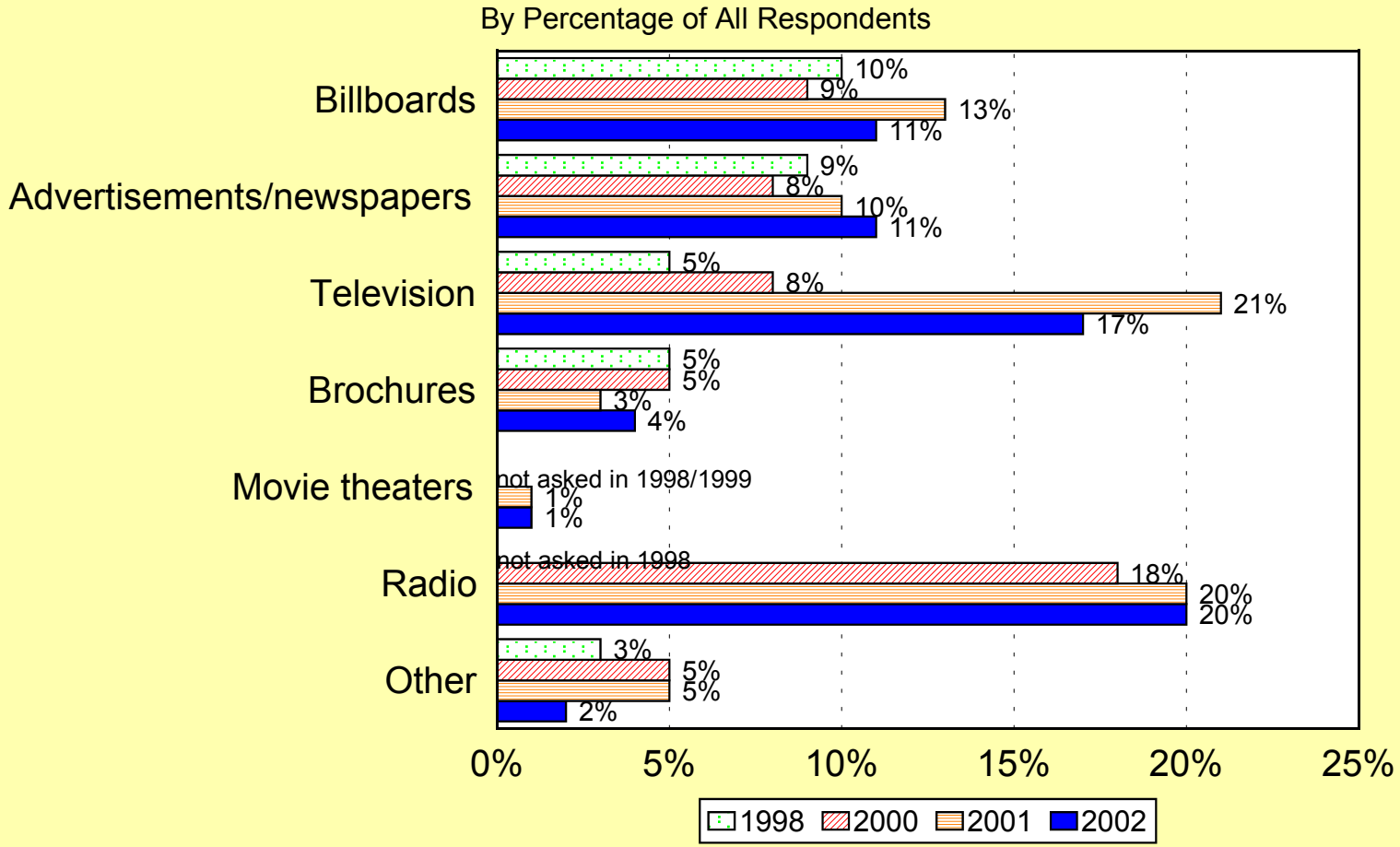
Source: ETC Institute Survey (Fall 2001, Fall 2002)

Q9: Percentage of Residents Who Had Seen or Heard Promotional Materials About Air Quality in the Kansas City Area During the Previous Year



Sources: ETC Institute Surveys (Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q9a: Percentage of Residents Who Have Seen or Heard Specific Types of Promotional Materials About Air Quality in the Kansas City Area

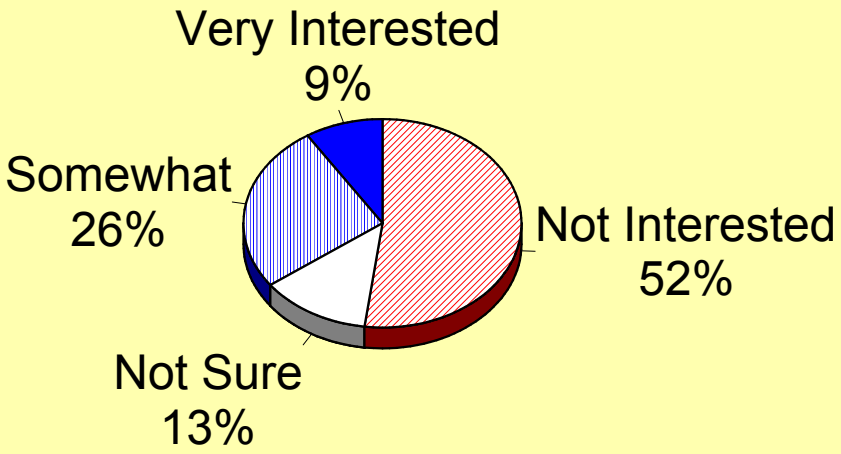


Sources: ETC Institute Surveys (Fall 1998, Fall 2000, Fall 2001, Fall 2002)

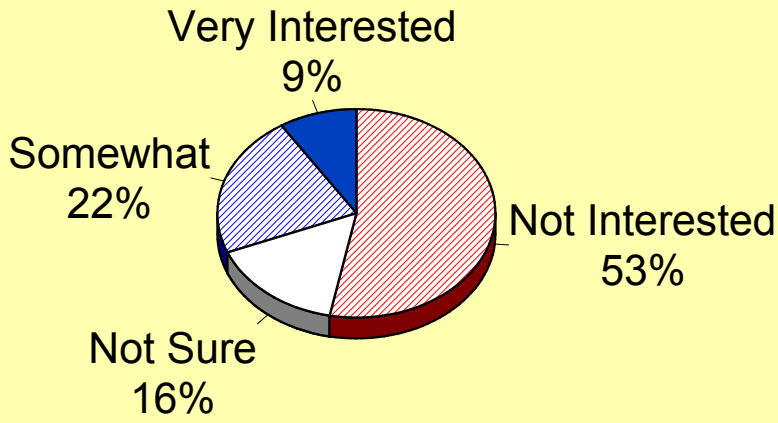
Q10: How Interested Residents Are in Getting Information About Air Quality Issues on the Internet

By Percentage of All Respondents

2001



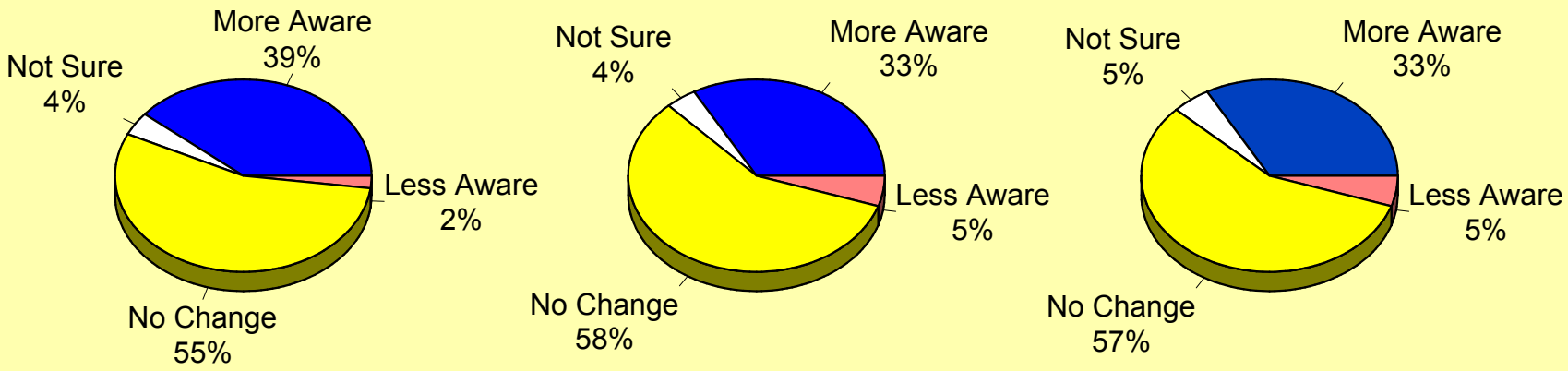
2002



Source: ETC Institute Survey (Fall 2001, Fall 2002)

Q11: How Residents Think Their Awareness of Air Quality Issues in the Kansas City Area Has Changed During the Past Two Years

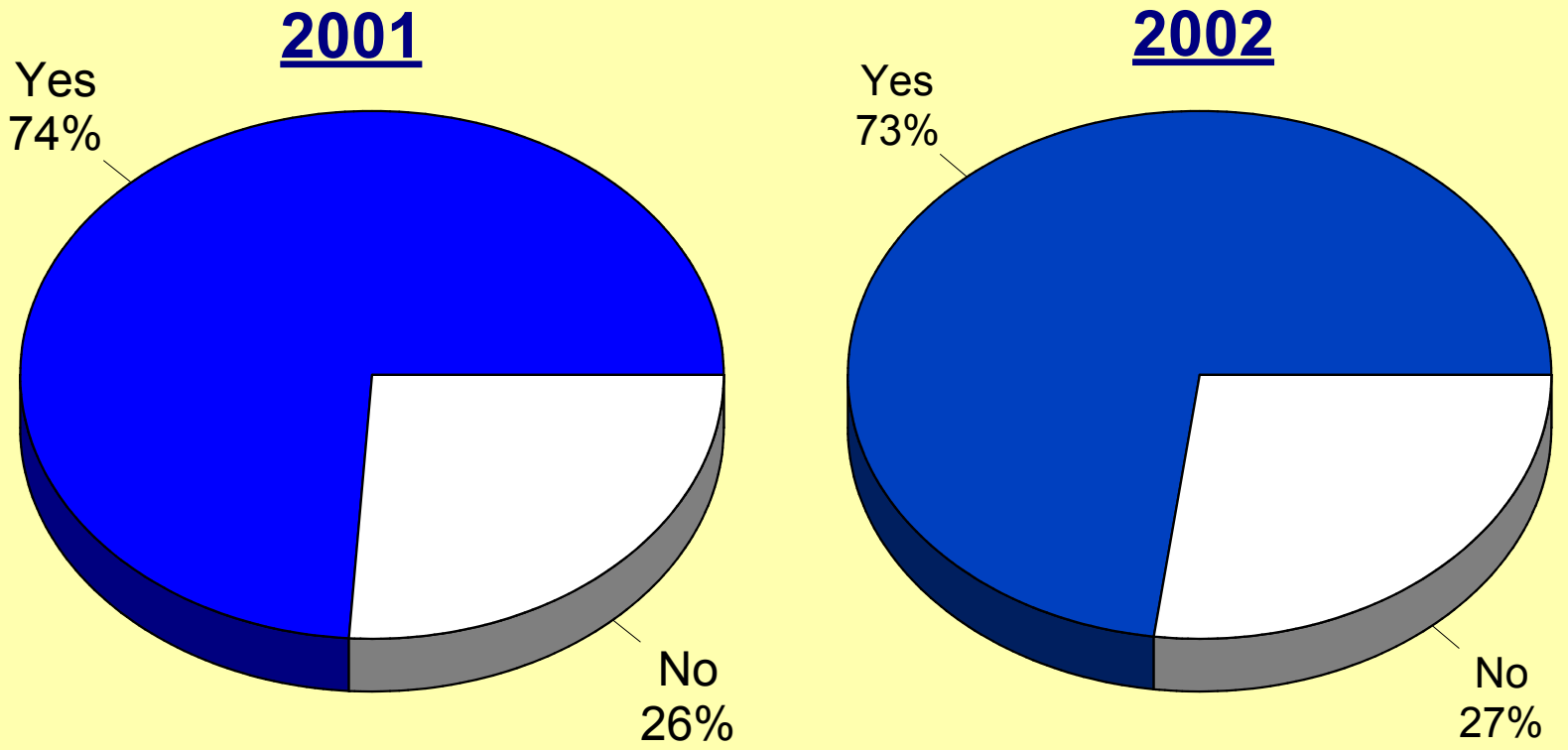
By Percentage of All Respondents



Sources: ETC Institute Surveys (Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q12: Percentage of Residents Who Have Seen Skycast (OZONE ALERT) Information During Weather Forecasts on Local Television News

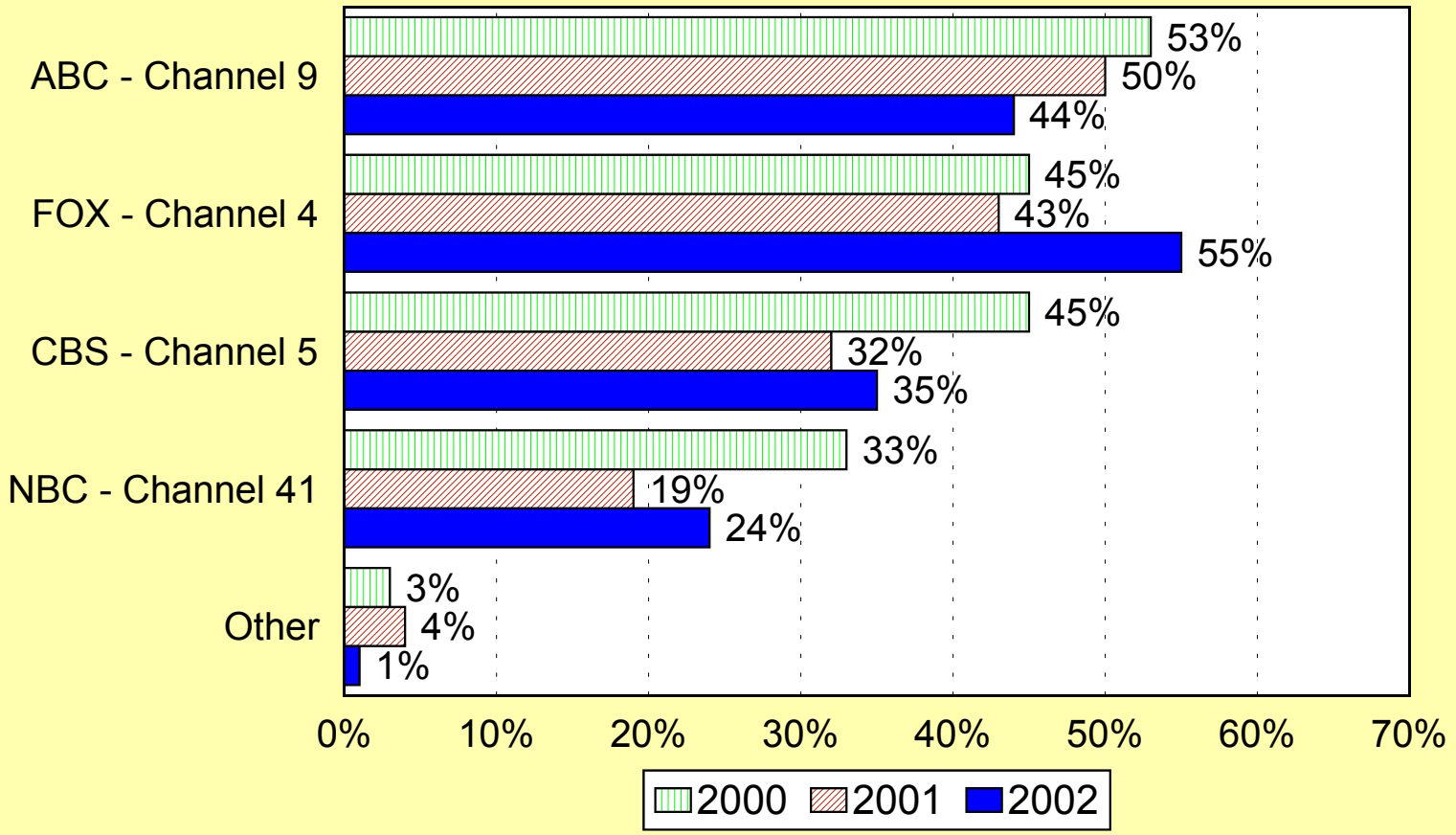
By Percentage of All Respondents



Source: ETC Institute Surveys (Fall 2001, Fall 2002)

Q12a: Percentage of Residents Who Have Seen Skycast (OZONE ALERT) Information on Local Television Stations

By Percentage of All Respondents Who Have Seen Skycast (Ozone Alert) Information

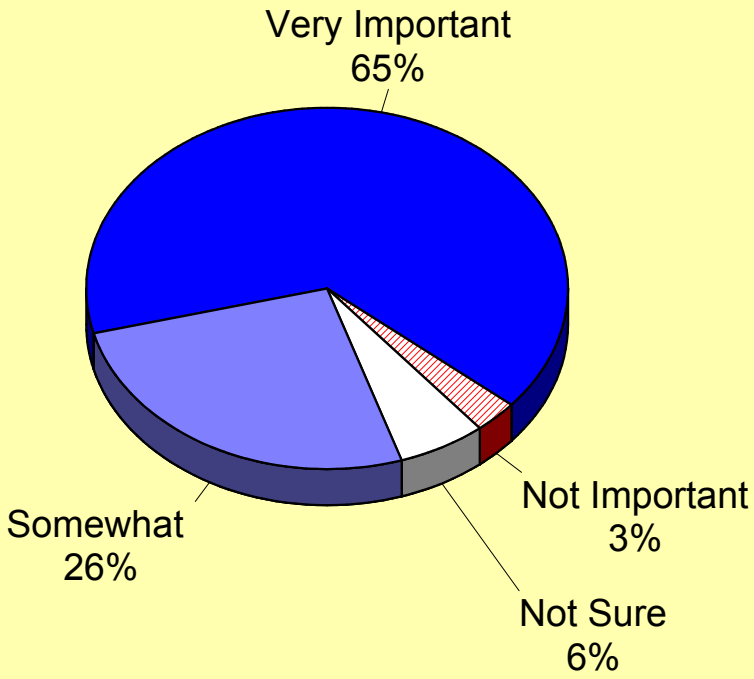


Source: ETC Institute Surveys (Fall 2000, Fall 2001, Fall 2002)

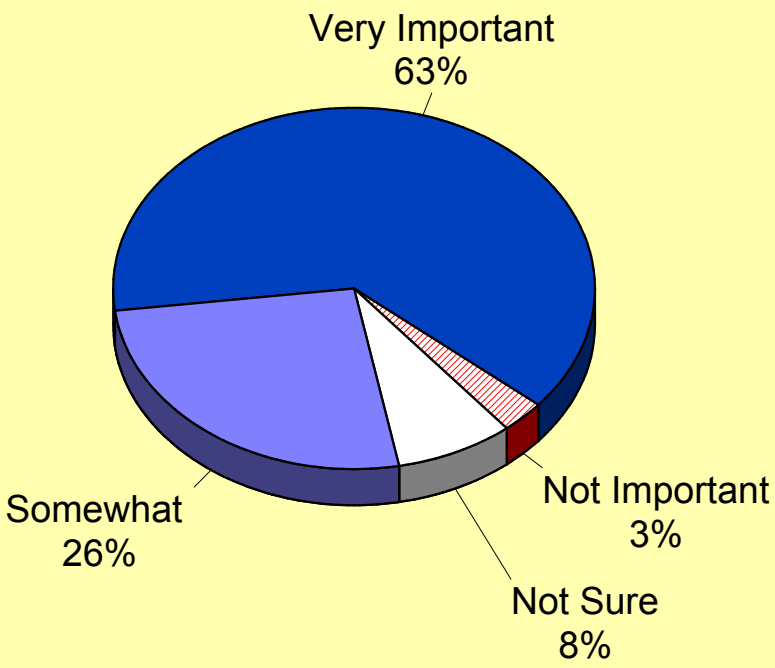
Q12b: How Important Residents Think It Is For Local Television News to Provide Skycast (OZONE ALERT) Information

By Percentage of All Respondents

2001



2002

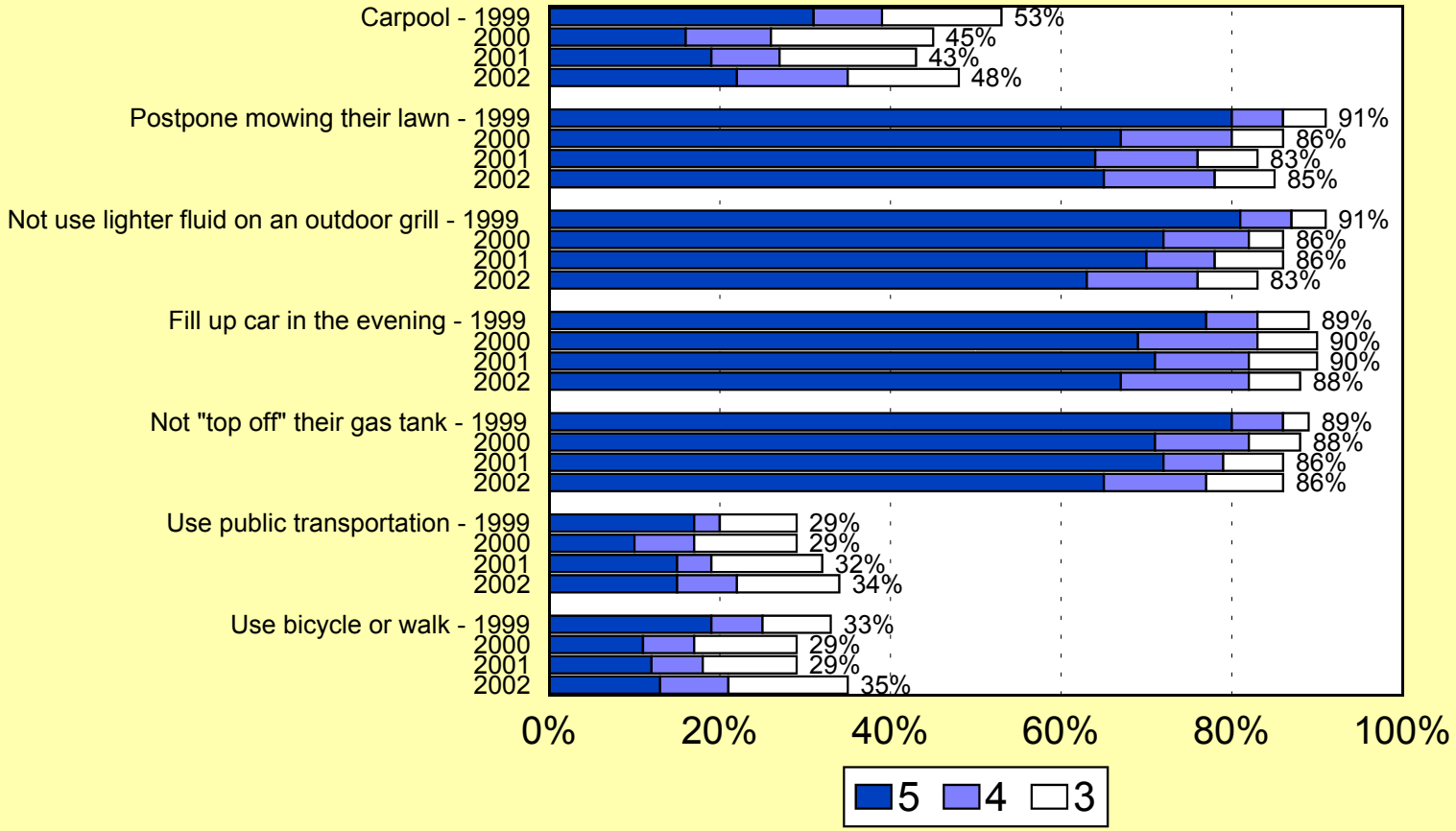


Source: ETC Institute Surveys (Fall 2001, Fall 2002)

Q13: Willingness of Residents to Do Various Activities on an OZONE (RED) ALERT Day in the Kansas City Area

By Percentage of All Respondents

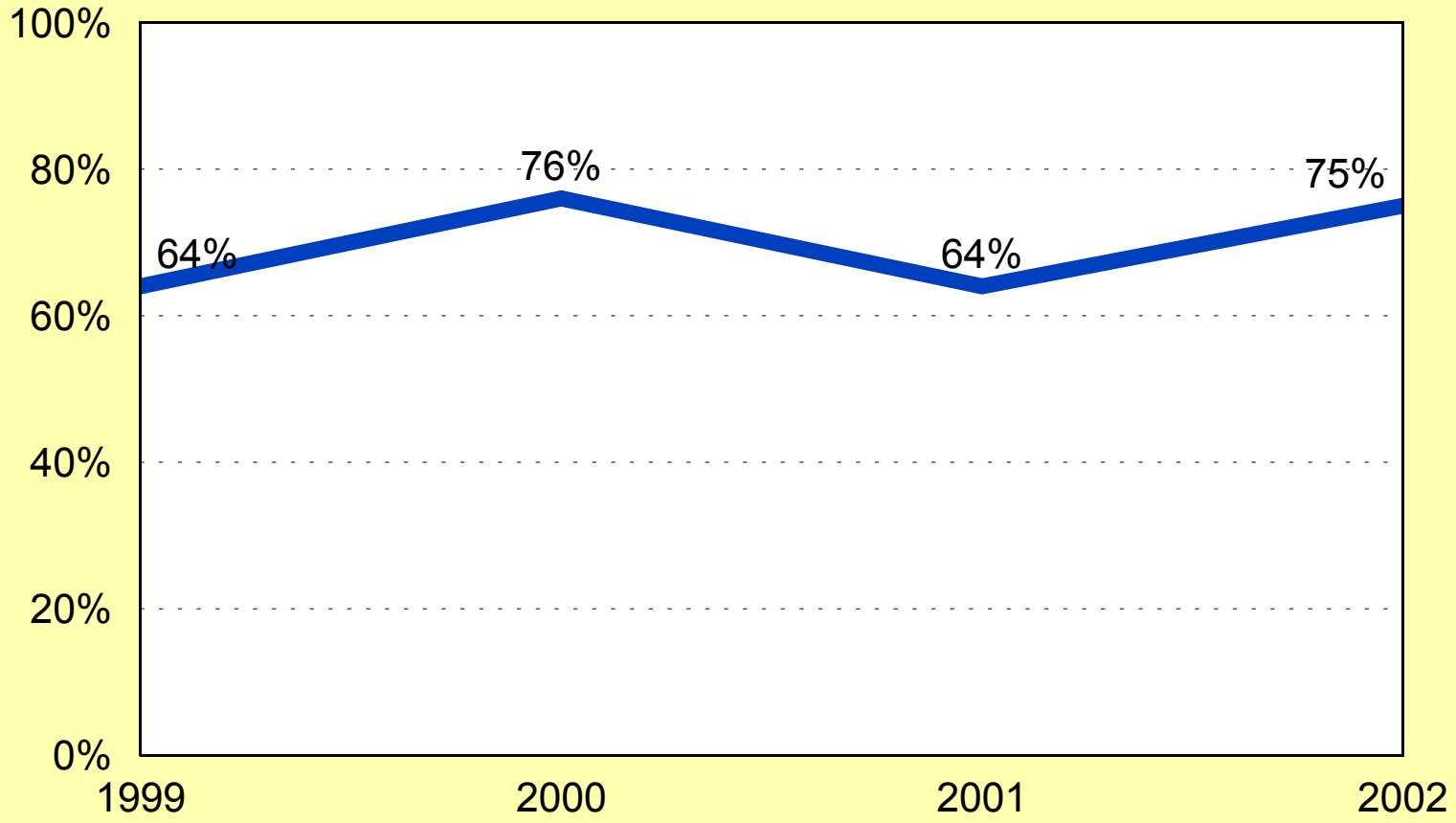
(Residents Rated Their Willingness on a Scale of 1-5 where 5 was "very willing" and 1 was "not willing")



Sources: ETC Institute Surveys (Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q14: Percentage of Kansas City Area Residents Who Took an Action to Help Reduce Air Pollution at Least Once on an OZONE (RED) ALERT Day During the Previous Summer

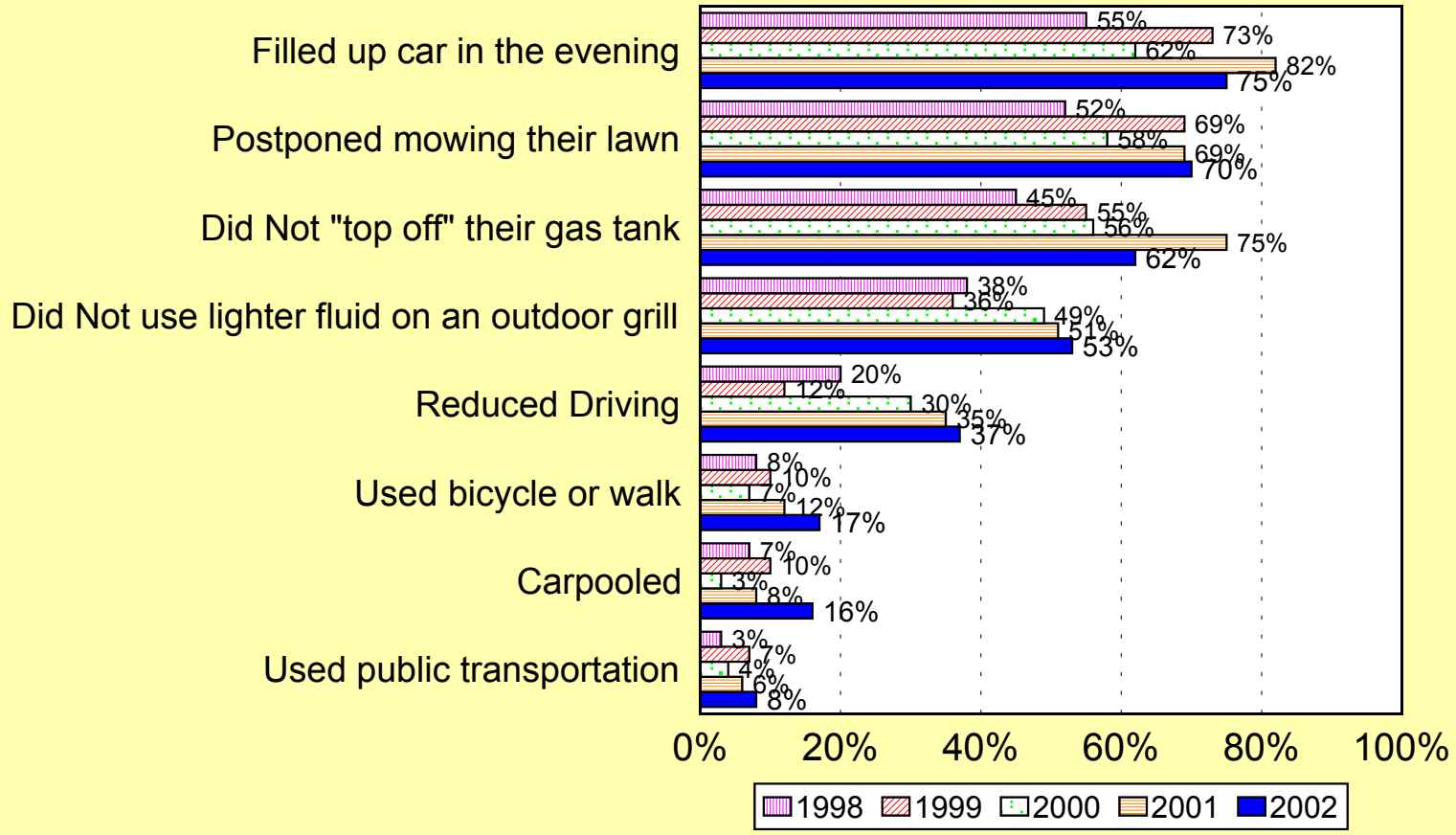
By Percentage of All Respondents



Sources: ETC Institute Surveys (Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q14a: Percentage of Kansas City Area Residents Who Took Specific Actions at Least Once on an OZONE (RED) ALERT Day During the Previous Summer

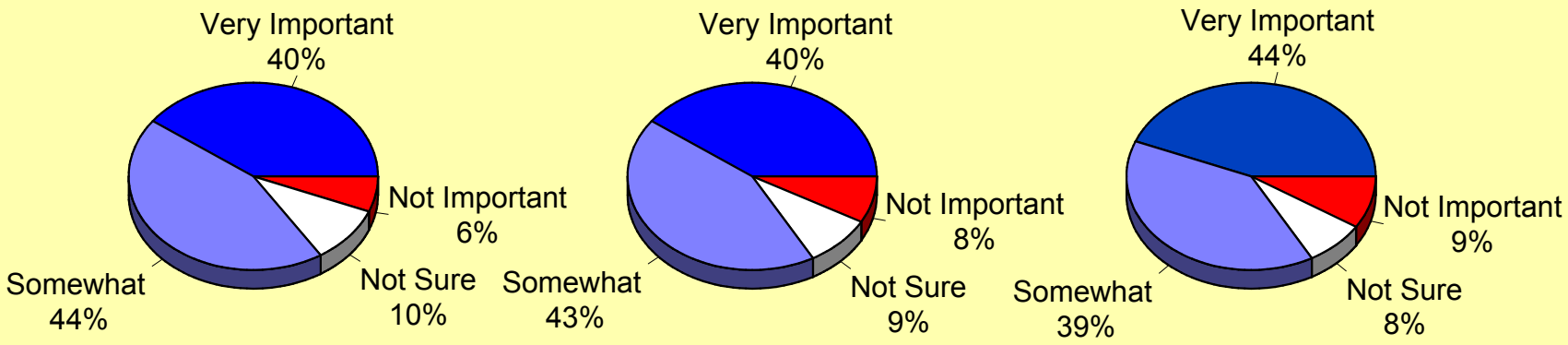
By Percentage of Respondents Who Indicated They Took Action on an Ozone (Red) Alert Day During the Previous Summer



Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001, Fall 2002)

Q15: Importance of Knowing When It Is an OZONE (RED) ALERT Day in the Kansas City Area

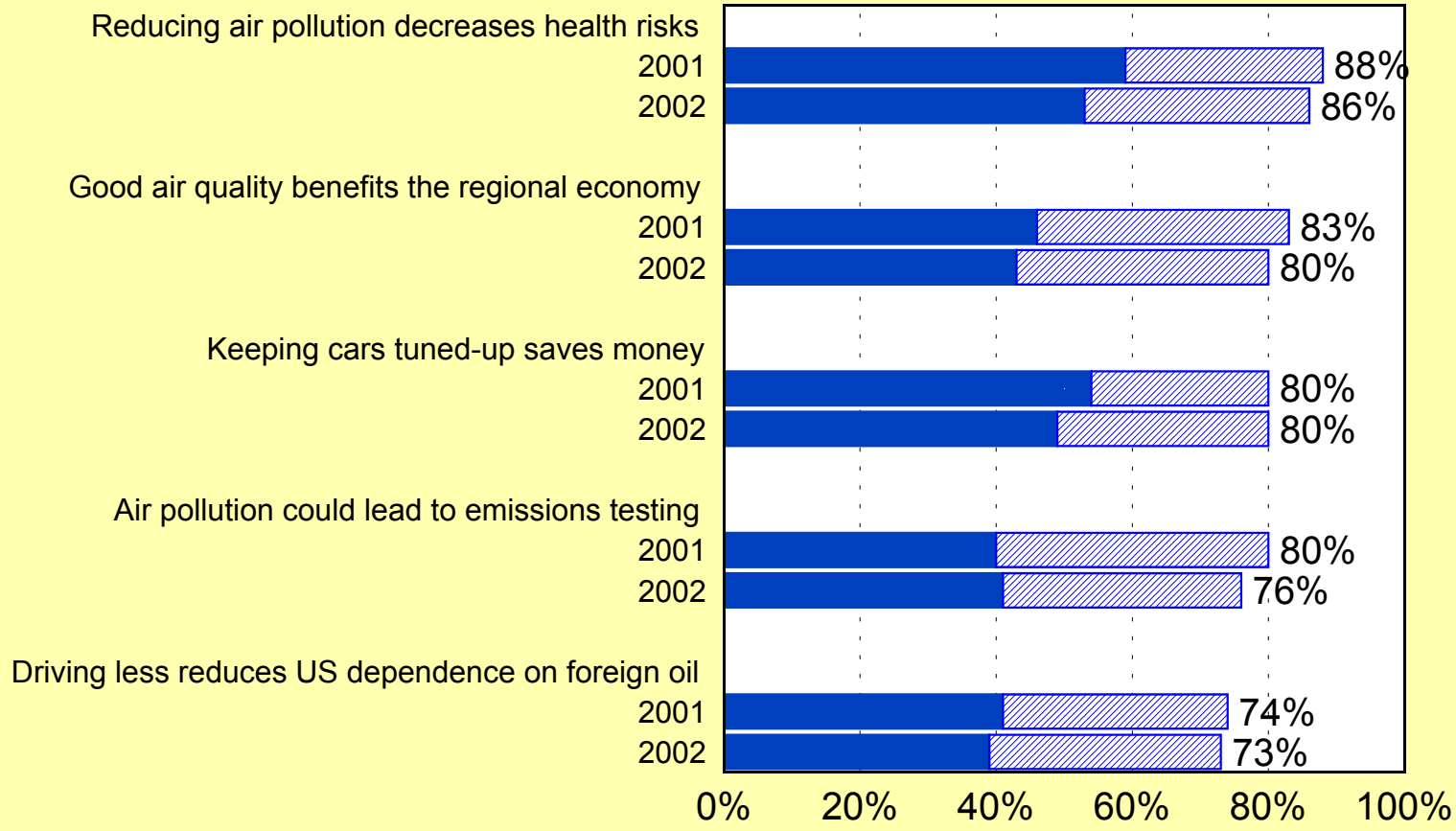
By Percentage of All Respondents



Source: ETC Institute Surveys (Fall 2000, Fall 2001, Fall 2002)

Q16a-e: How Various Messages Would Effect the Willingness of Residents to Take Action to Help Reduce Air Pollution

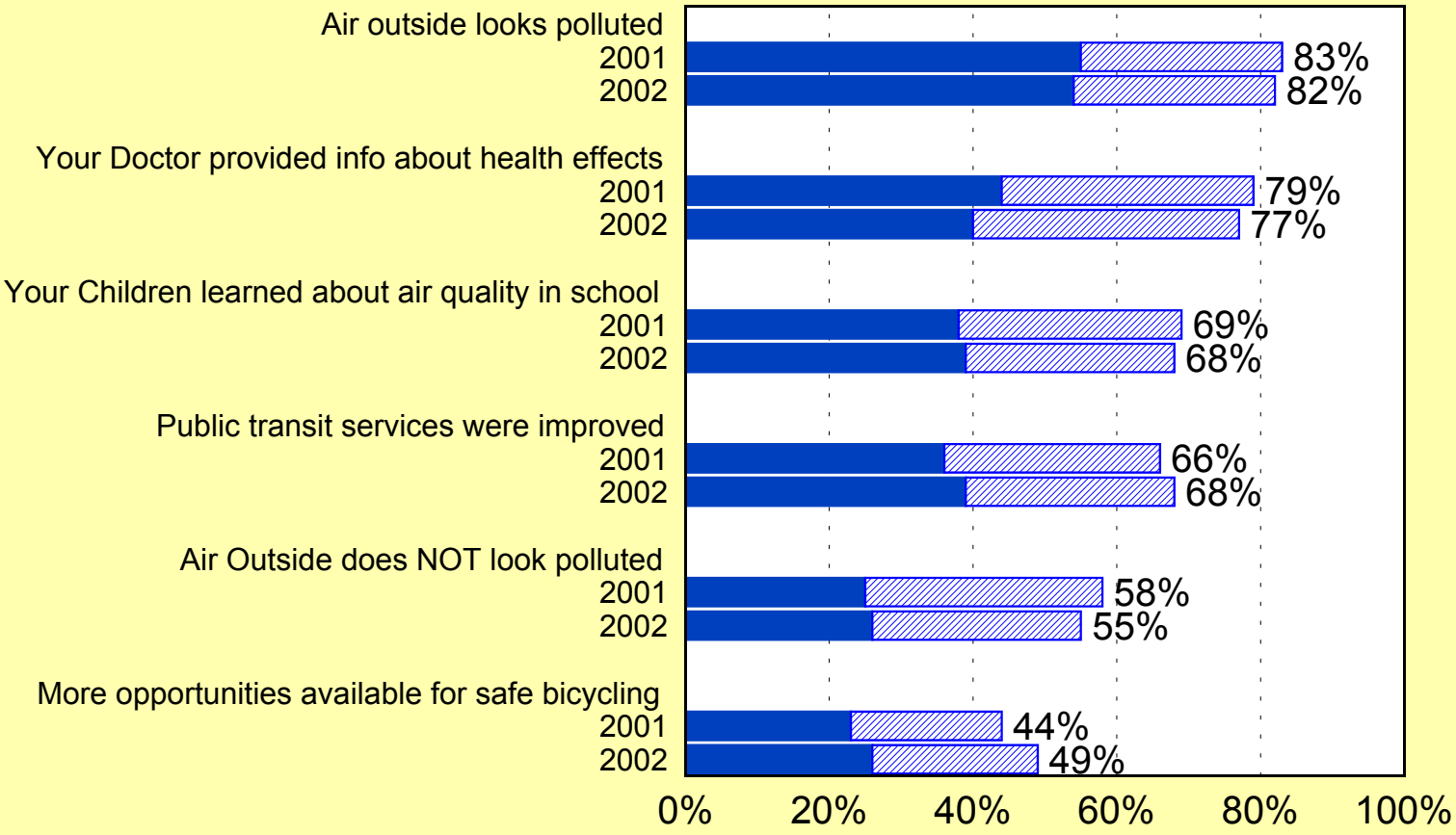
By Percentage of All Respondents



Source: ETC Institute Surveys (Fall 2001, Fall 2002)

Q16f-k: How Various Actions Would Effect the Willingness of Residents to Take Action to Help Reduce Air Pollution

By Percentage of All Respondents



Source: ETC Institute Surveys (Fall 2001, Fall 2002)

Q17: Other Factors That Would Motivate Residents to Help Reduce Air Pollution (open-ended response)

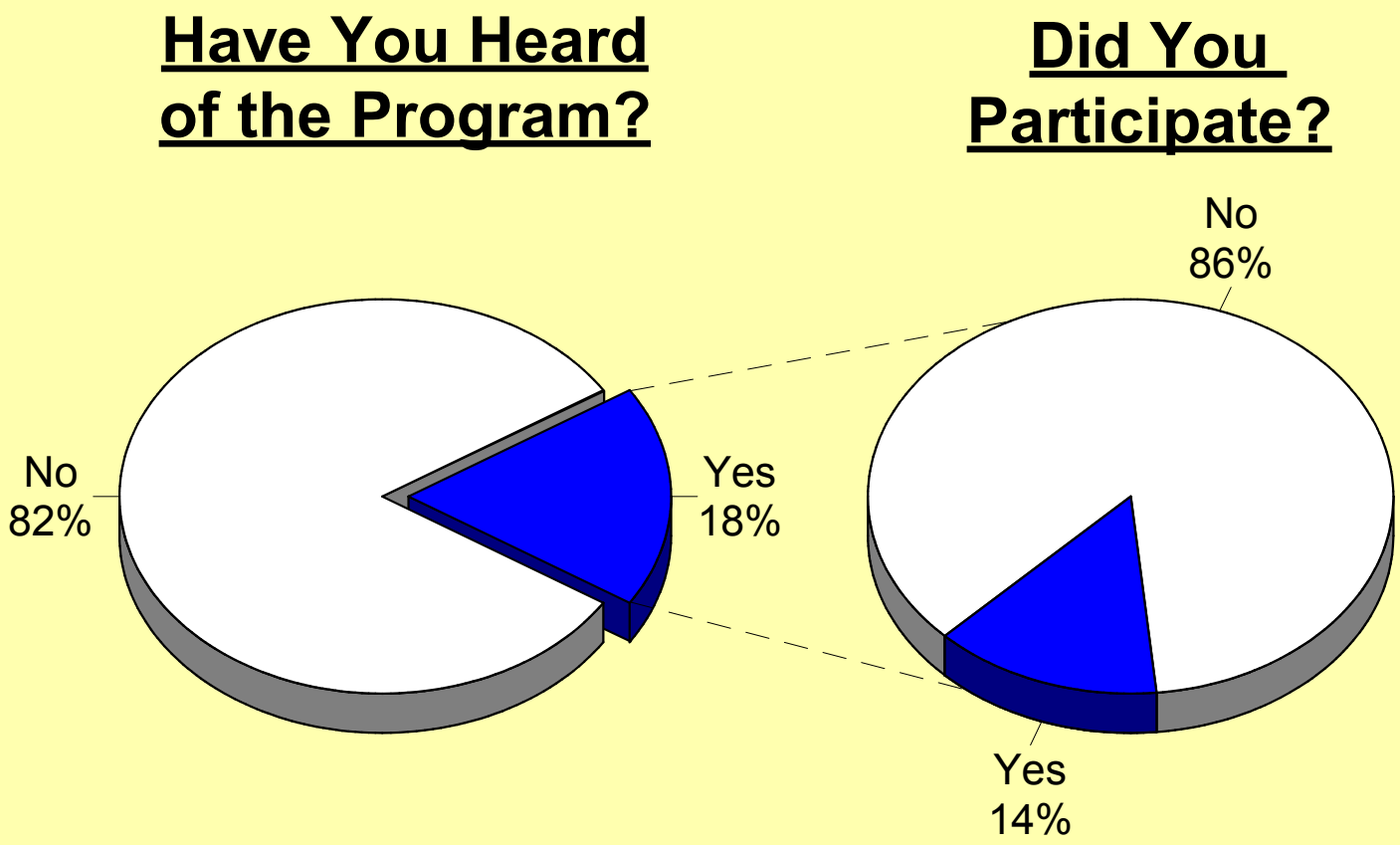
Selected Responses

- IF PRICE OF FUEL INCREASED SIGNIFICANTLY
- IF MORE COVERAGE WAS PROVIDED BY THE NATIONAL MEDIA
- IF I HAD HEALTH PROBLEMS
- IF MORE INFORMATION WERE PROVIDED ABOUT HEALTH RISKS
- IF THEY GAVE TAX INCENTIVES
- IF THEY TOLD US ABOUT THE EFFECTS ON ANIMALS AND PLANTS
- IF IT WERE THE LAW

Source: ETC Institute Survey (Fall 2002)

Q18: Awareness of the Gas Cap Giveaway Program

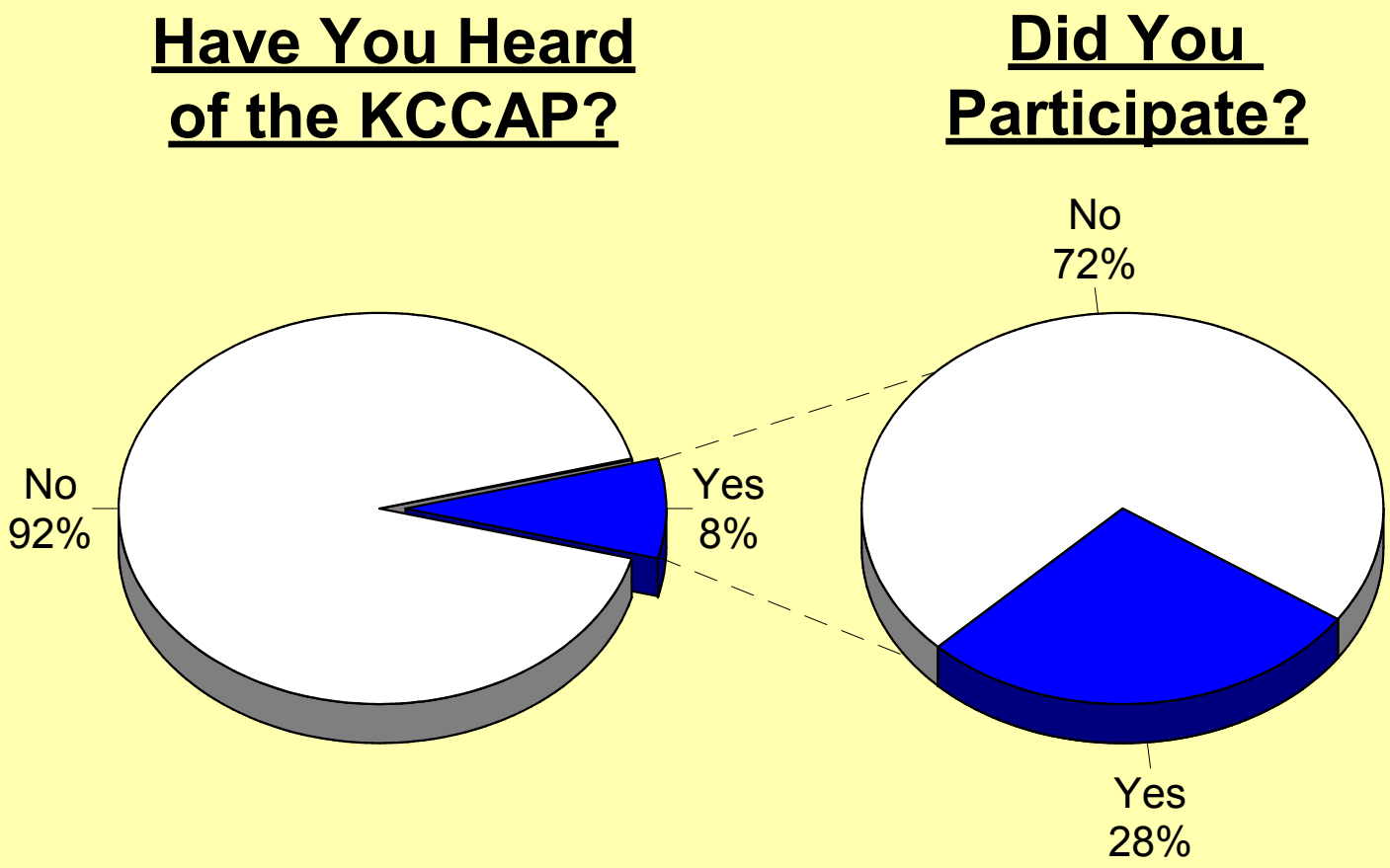
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2002)

Q19: Awareness of the Kansas City Clean Air Pledge (KCCAP)?

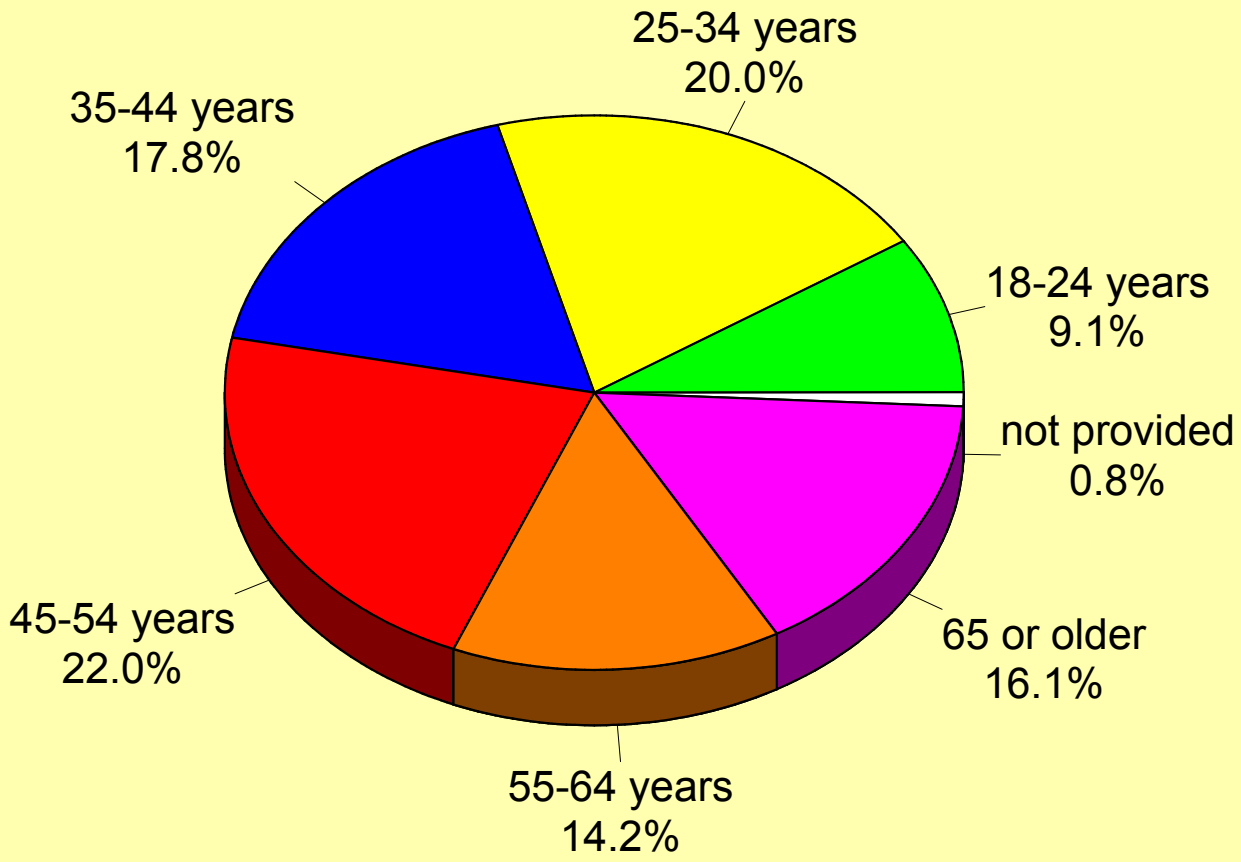
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2002)

Q20: Age of Respondents

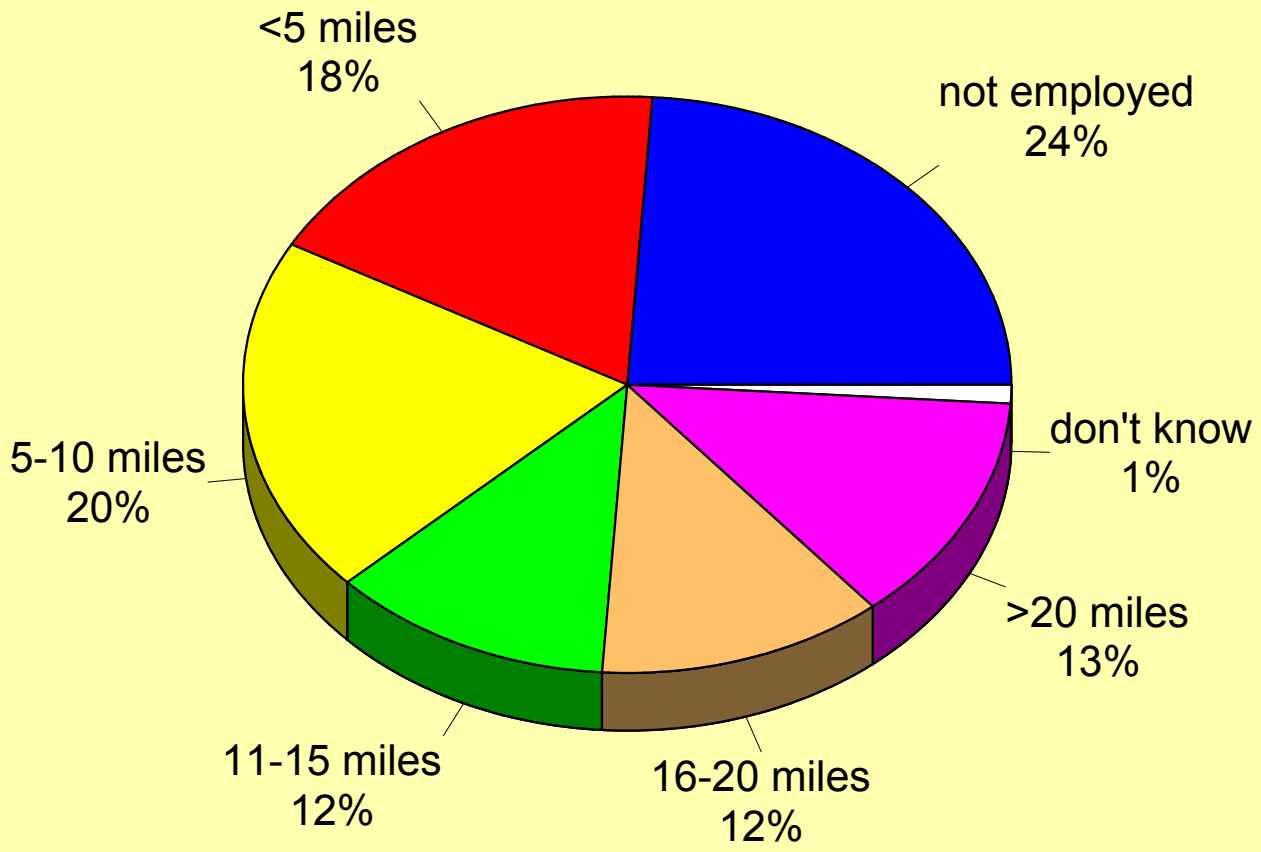
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2002)

Q21: Distance Traveled One-Way to Work

By Percentage of All Respondents

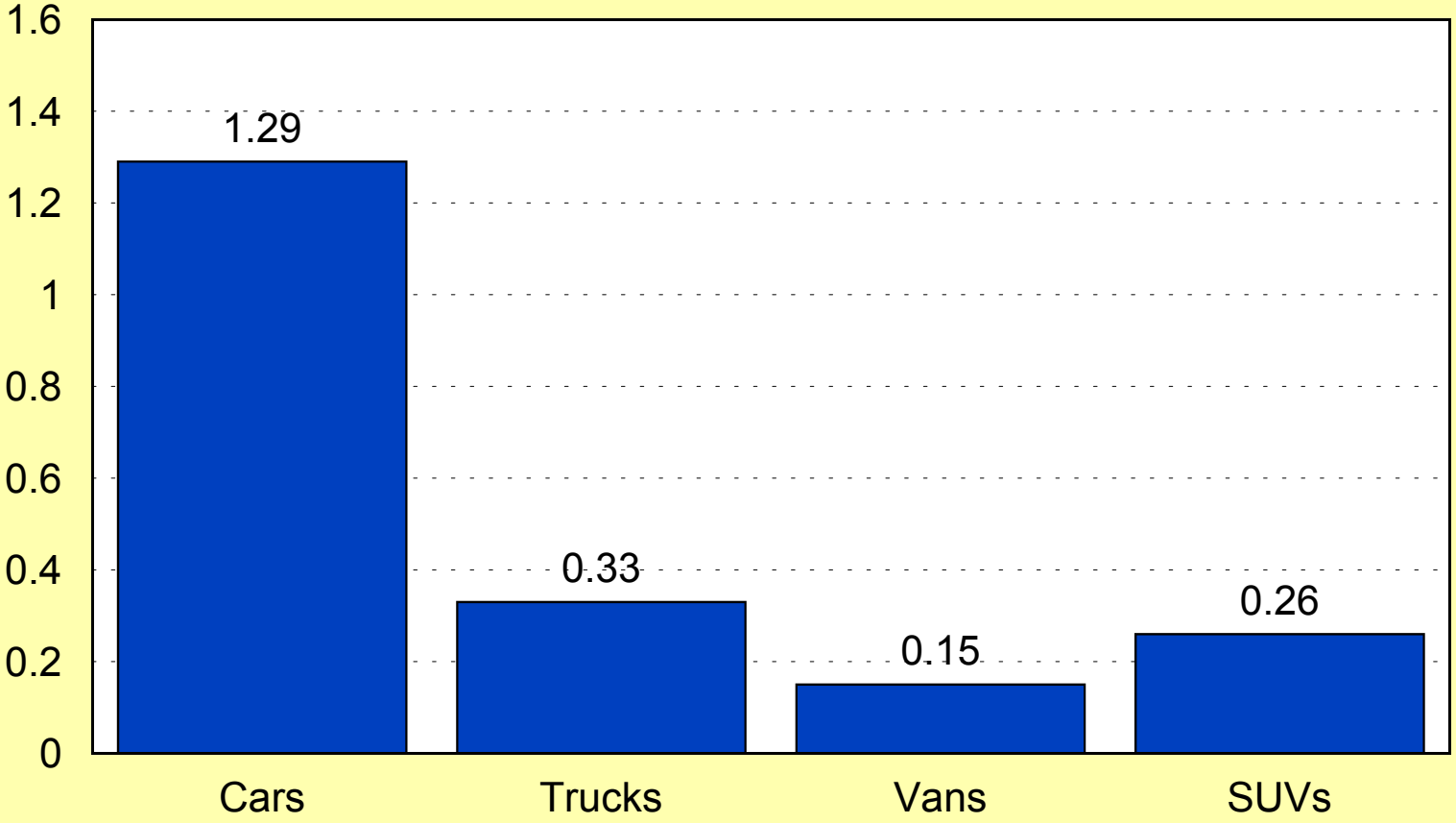


Source: ETC Institute Survey (Fall 2002)

Q22: Mean Number of Vehicles Per Household By Vehicle Type

Mean for All Responding Households

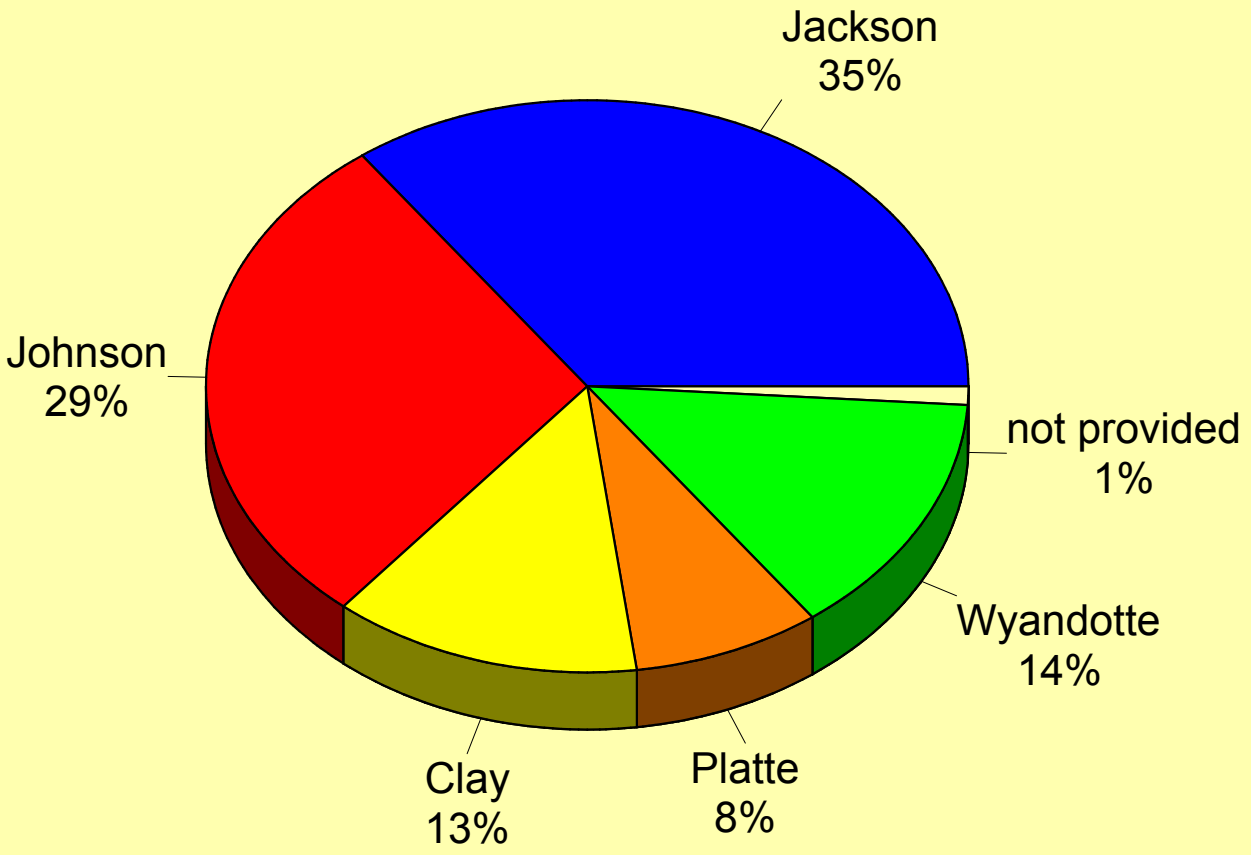
Mean Number of Vehicles Per Household was 2.03



Source: ETC Institute Survey (Fall 2002)

Q23: County Where Respondents Live

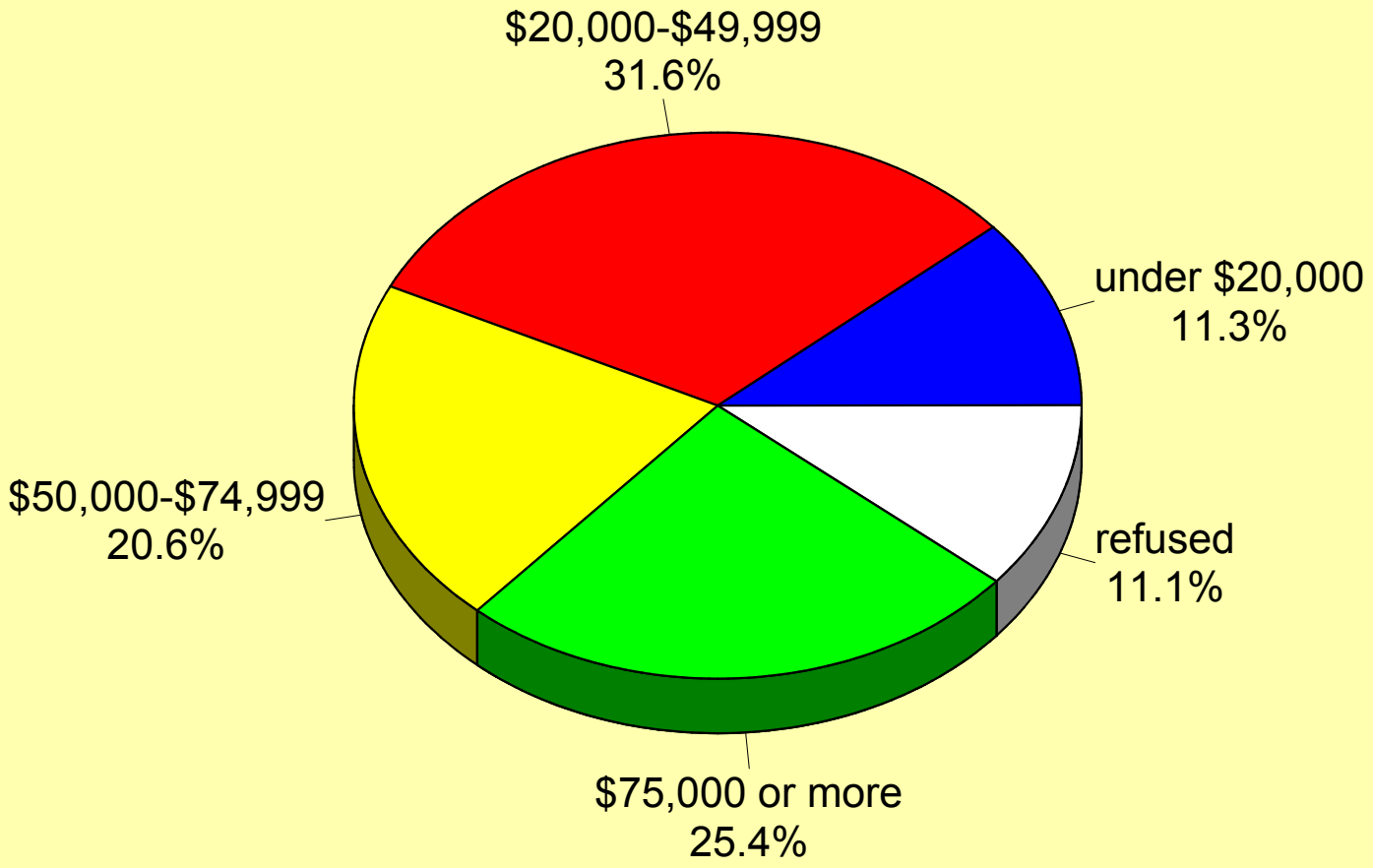
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2002)

Q24: Annual Household Income

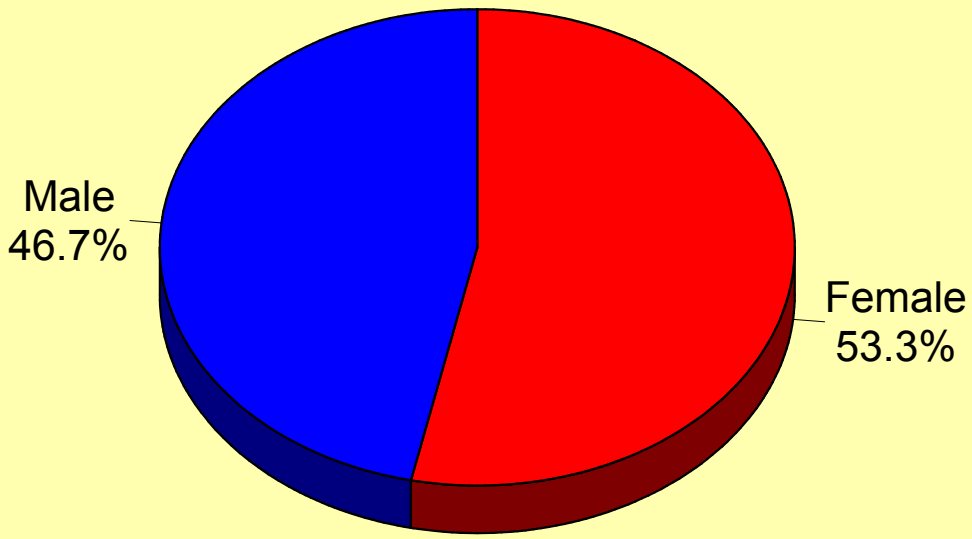
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2002)

Q25: Respondent's Gender

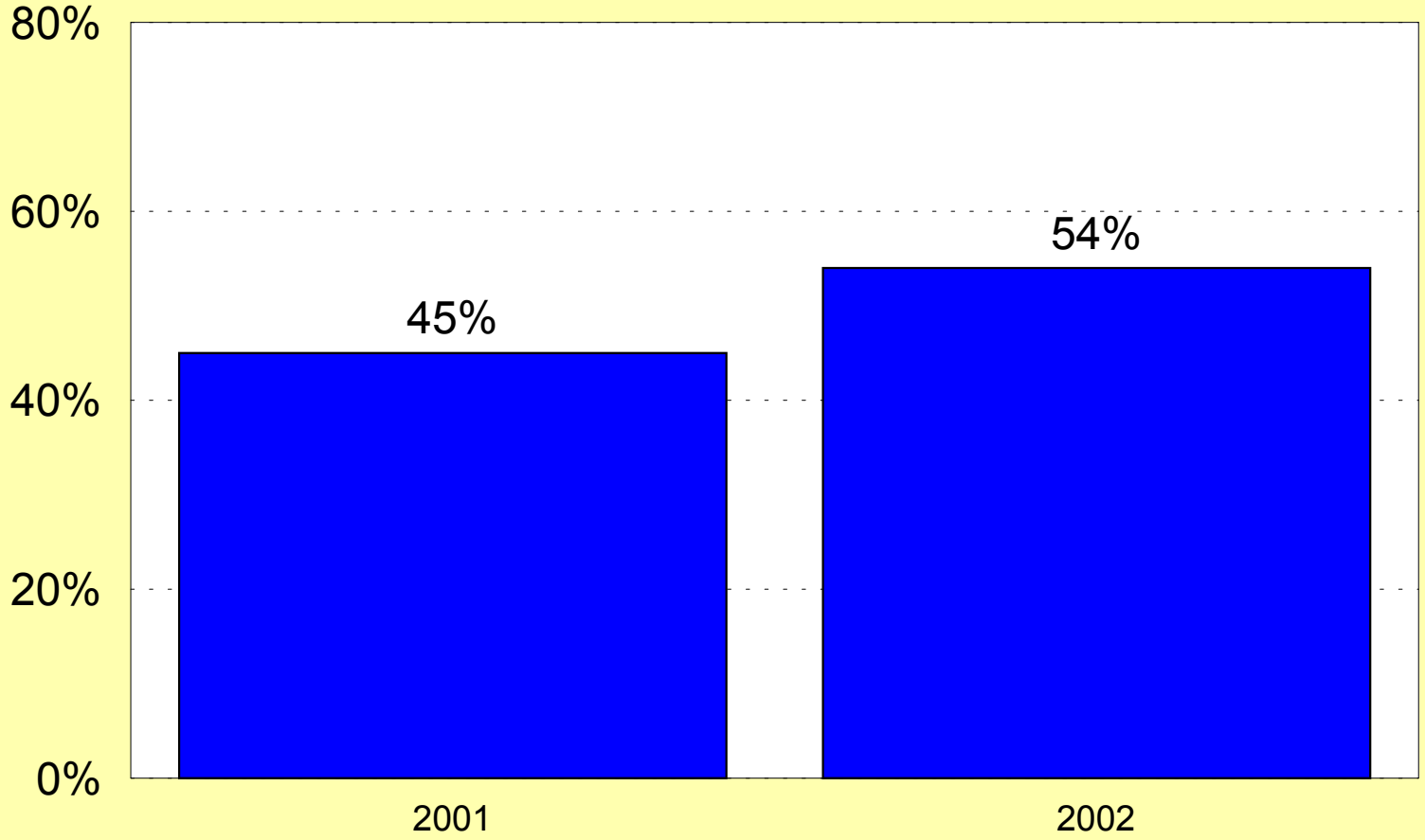
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2002)

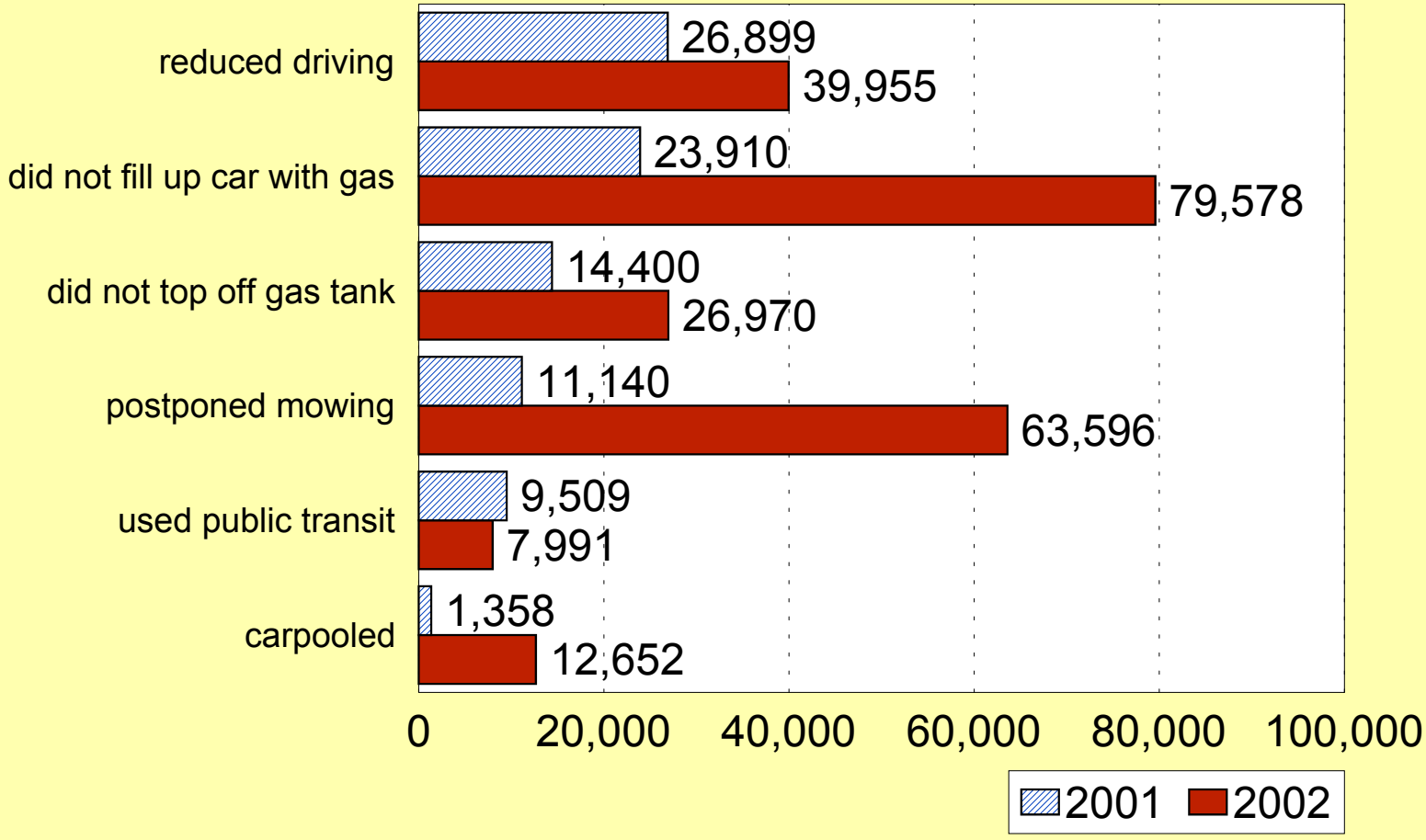
Ozone Alert Day Survey

Percentage of Residents Who Changed Their Behavior As a Result of Knowing It Was an "Ozone Alert" Day 2001 vs. 2002



Source: ETC Institute Surveys (Summer 2001 and Summer 2002)

Estimated Number of Kansas City Area Adults Who Modified Their Behavior as a Result of Knowing It Was an "Ozone Alert" Day During the Summer of 2002 vs. 2001



Source: ETC Institute Surveys (Summer 2001 and Summer 2002)

Q1. Are you aware that the Kansas City area usually has several days each summer when the air pollution levels exceed the health standards set by the Environmental Protection Agency?

Q1 Air pollution level exceed standards	Number	Percent
1=yes	511	79.1 %
2=no	134	20.7 %
9=don't know	1	0.2 %
Total	646	100.0 %

Q2. Do you or anyone in your household have a breathing or respiratory problem?

Q2 Have a breathing/respiratory problem	Number	Percent
1=yes	220	34.1 %
2=no	426	65.9 %
Total	646	100.0 %

Q3. How concerned are you about the health consequences of poor air quality in the Kansas City area?

Q3 How concerned about poor air quality	Number	Percent
1=very concerned	238	36.8 %
2=somewhat	306	47.4 %
3=not sure	41	6.3 %
4=not concerned	61	9.4 %
Total	646	100.0 %

Q4. Do you think air pollution in the Kansas City area is:

Q4 Do you think air pollution in KC is	Number	Percent
1=get much worse	96	14.9 %
2=somewhat worse	272	42.1 %
3=stay the same	226	35.0 %
4=somewhat better	35	5.4 %
5=get much better	4	0.6 %
9=don’t know	13	2.0 %
Total	646	100.0 %

Q5. Do you think you can personally do anything to help improve air quality in the Kansas City area?

Q5 Do you think you can help improve air	Number	Percent
1=yes	316	48.9 %
2=no	136	21.1 %
3=not sure	194	30.0 %
Total	646	100.0 %

Q6. Do you remember hearing about any "OZONE ALERT" days this past summer?

Q6 Remember hearing of OZONE ALERT days	Number	Percent
1=yes	534	82.7 %
2=no	111	17.2 %
9=don't know	1	0.2 %
Total	646	100.0 %

Q7. What do you think an "OZONE ALERT" day means?

Q7 What do you think OZONE ALERT means	Number	Percent
1 = high mold/pollen levels	126	19.5 %
2 = high tire particle counts	124	19.2 %
3 = high ozone levels	317	49.1 %
4 = hole in ozone layer	216	33.4 %
5 = air is dirty/polluted	248	38.4 %
6 = other	27	4.2 %
9 = don't know	17	2.7 %
Total	1075	

Q7. Other Reasons Given:

Q7 If other
AIR TEMPERATURE HIGH
CARBON MONOXIDE TRAPPED
CAREFUL OF WHAT WE DO THAT DAY
EPA WARNING
HARD TO BREATH
HEAT BAD
HOT AND HARDER TO BREATH
INVERSION LAYER BTWN HOT/COLD
NO WIND TO CIRCULATE THE AIR
POLLUTION FROM HEAT THAT DAY
SUN CAN DAMAGE EXPOSED SKIN
TEMP & HUMIDITY
TEMP/HUMIDITY
UV RAYS ARE HARMFUL TO SKIN
VERY HEATED DAY
WEATHER BAD
WEATHER DOME TRAPS POLLUTION

Q8. Have you seen or heard the phrase "OZONE ALERT" used to describe air quality in the Kansas City area from any of the following sources? (check all that apply)

Q8 Have seen/heard phrase OZONE ALERT	Number	Percent
0 = don't know/no answer	32	5.0 %
1 = newspaper	154	23.8 %
2 = radio	295	45.7 %
3 = morning TV	366	56.7 %
4 = evening TV	394	61.0 %
5 = website	29	4.5 %
9 = other	20	3.1 %
Total	1290	

Q8a. Which one of these sources do you consult most often?

Q8a Which source consult most often	Number	Percent
0=no answer	25	3.9 %
1=newspaper	58	9.0 %
2=radio	142	22.0 %
3=morning TV	186	28.8 %
4=evening TV	217	33.6 %
5=website	6	0.9 %
9=other	12	1.9 %
Total	646	100.0 %

Q9. Have you seen or heard any advertisements, brochures, billboards, radio or other promotional media about air quality in the Kansas City area during the past year?

Q9 Seen/heard advertisements past year	Number	Percent
1=yes	236	36.5 %
2=no	410	63.5 %
Total	646	100.0 %

Q9a. What types of promotional media have you seen or heard? (adjusted to reflect all respondents, not just those who answered Yes to Question 9) – multiple responses allowed

Q9a Types of promotional materials seen	Number	Percent
0 = none selected	410	63.5 %
1 = billboards	73	11.3 %
2 = ad in newspaper	71	11.0 %
3 = commercial TV	109	16.9 %
4 = movie theater	9	1.4 %
5 = brochures	24	3.7 %
6 = radio	129	20.0 %
7 = other	14	2.2 %
Total	839	

Q9b. [If Yes to Question 9] Which one of these types of promotional media provide you with the most frequent information about air quality?

Q9b Promotional media provide most info	Number	Percent
0=none selected	2	0.8 %
1=billboards	15	6.4 %
2=ad in newspaper	26	11.0 %
3=commercial on TV	77	32.6 %
4=movie theater	2	0.8 %
5=brochures	5	2.1 %
6=radio	100	42.4 %
7=other	9	3.8 %
Total	236	100.0 %

Q10. How interested would you be in getting air quality information on the Internet?

Q10 Getting information on the Internet	Number	Percent
1=very interested	61	9.4 %
2=somewhat	144	22.3 %
3=not sure	101	15.6 %
4=not interested	340	52.6 %
Total	646	100.0 %

Q11. Compared to two years ago, would you say you:

Q11 Compared to 2 yrs ago would you say	Number	Percent
1=are more aware	212	32.8 %
2=about the same	363	56.2 %
3=are less aware	34	5.3 %
4=not applicable/did not live here	34	5.3 %
9=don't know	3	0.5 %
Total	646	100.0 %

Q12. Have you seen "SKYCAST" information during the weather forecast on local television news?

Q12 Have seen SKYCAST info on TV	Number	Percent
1=yes	469	72.6 %
2=no	177	27.4 %
Total	646	100.0 %

Q12a. [IF YES to question #12]: On which TV stations have you seen "SKYCAST" information? (check all that apply)

Q12a Which TV stations seen SKYCAST info	Number	Percent
1 = NBC=Chan 41	113	24.1 %
2 = CBS=Chan 5	165	35.2 %
3 = FOX=Chan 4	257	54.8 %
4 = ABC=Chan 9	207	44.1 %
5 = other	3	0.6 %
9 = don't remember	18	3.8 %
Total	763	

Q12b. [IF YES to question #12]: How important do you think it is for local television stations to provide "SKYCAST" information?

Q12b Local TV station provide SKYCAST	Number	Percent
1=very important	295	62.9 %
2=somewhat	122	26.0 %
3=not sure	36	7.7 %
4=not important	16	3.4 %
Total	469	100.0 %

Q13. An air pollution "OZONE ALERT" indicates that weather conditions may lead to poor air quality. Using a 5-point scale where "5" means very willing and "1" means not willing, how willing would you be to do each of the following on an "OZONE ALERT" day in the Kansas City area?

(N=646)

	not willing 1	2 2	3 3	4 4	very willing 5	not sure 9
Q13a Carpool on Ozone alert day	29.6%	10.5%	13.2%	13.2%	21.7%	11.8%
Q13b Postpone mowing lawn	6.2%	2.9%	6.5%	13.0%	65.3%	6.0%
Q13c Not use lighter fluid-outdoor grill	7.1%	2.2%	6.5%	12.9%	62.8%	8.5%
Q13d Fill up car w/gas in evening	5.6%	2.6%	5.6%	15.0%	67.0%	4.2%
Q13e Quit topping off gas tank	6.7%	2.5%	9.0%	11.5%	64.5%	5.9%
Q13f Use public transportation	46.5%	10.4%	12.4%	7.3%	14.9%	8.5%
Q13g Use bike/walk to work/run errands	45.5%	9.8%	14.0%	8.1%	13.4%	9.3%

Q14. Did you do any of the actions listed above this past summer?

Q14 Did you do any actions on alert days	Number	Percent
1=yes	482	74.6 %
2=no	164	25.4 %
Total	646	100.0 %

Q14a. [IF YES to question #14]: Which actions did you take? (check all that apply)

Q14a Which actions did you take	Number	Percent
0 = no answer	1	0.2 %
1 = carpooled	78	16.2 %
2 = postponed mowing	335	69.5 %
3 = did not use lighter fluid	254	52.7 %
4 = did not fill up car with gas	361	74.9 %
5 = did not top off gas tank	301	62.4 %
6 = used public transportation	39	8.1 %
7 = rode bike/walked	83	17.2 %
8 = reduced driving	179	37.1 %
9 = other	2	0.4 %
Total	1633	

Q15. How important is it for you to know when it is an "OZONE ALERT" day in the Kansas City area?

Q15 Know when alert day is in KC area	Number	Percent
1=very important	281	43.5 %
2=somewhat	250	38.7 %
3=not sure	52	8.0 %
4=not important	63	9.8 %
Total	646	100.0 %

Q16. Would the following make you "Much more willing", "Somewhat more willing" or "Less willing" to take action to reduce air pollution in greater Kansas City? If it would not affect you, circle "No change".

(N=646)

	much more willing 1	some-what more willing 2	no change 3	less willing 4	don't know 9
Q16a Decrease chances to develop asthma	53.4%	32.5%	12.7%	0.6%	0.8%
Q16b Good air benefits region economy	42.6%	37.2%	17.6%	1.9%	0.8%
Q16c Lead to new regulations	41.2%	35.3%	18.6%	3.9%	1.1%
Q16d Keeping car tuned save you money	49.2%	30.5%	18.0%	1.5%	0.8%
Q16e Driving less reduce dependence-oil	39.3%	33.9%	22.8%	3.3%	0.8%
Q16f Info about health effects of air pollut	39.9%	36.8%	20.6%	1.4%	1.2%
Q16g Child learned about air pollution	39.2%	28.9%	25.9%	3.9%	2.2%
Q16h If air does not look polluted	26.3%	29.1%	39.3%	3.3%	2.0%
Q16i If air does look polluted	54.3%	27.9%	14.7%	1.5%	1.5%
Q16j Public transit were easier to use	39.2%	28.5%	26.2%	4.8%	1.4%
Q16k More opportunities for safe biking	26.0%	23.1%	39.2%	9.9%	1.9%

Q17. What other factors not mentioned here would motivate you to help reduce air pollution?

Q17 Would motivate

AFFORDABLE ELECTRIC/GAS HYBRID AUTOMOBILES
AFFORDABLE HOUSING CLOSER-MAJOR AREAS OF EMPLOYMNT
ALREADY DO AS MUCH AS I CAN
ALREADY DO OUR BEST TO KEEP FROM POLLUTING
ALREADY DO WHAT I CAN-PUBLIC TRANSP NEEDS IMPROVED
ALREADY KEEP CAR TUNED UP
ANYTHING THAT ANYONE COULD COME UP WITH
AVOID OUTSIDE BURNING OF DEBRIS
BAN ALL SMOKING OF CIGARETTES ANYWHERE
BETTER BUS LINES & MORE EFFICIENT CARS
BIGGER FINES ON BIG BUSINESS
CHANGES/SACRIFICES TODAY WILL EFFECT THINGS TOMMOROW
CHEAPER GAS
CITY PLANNING
COMMUTER RAIL
COMPENSATION FOR LOST BUSINESS REVENUE
COMPLYING CAN MAKE A DIFFERENCE IN CLEAN-CLEAR AIR
CONTINUING AIR POLLUTION BY BARBER QUERRY
CONVENIENT PUBLIC TRANSIT-ENFORCE EMISSION STANDARD
CRIPPLED MUST USE CAR TO GET AROUND
DONT DRIVE MUCH ANYMORE
DONT GET MOTIVATED ABOUT SUCH MUNDANE PROBLEM
DONT KNOW RIGHT NOW
EDUCATE PEOPLE MORE OF SERIOUS IMPACT OF BAD AIR QUALITY
ELECTRIC CARS
ELECTRIC CARS ARE CHEAPER
ELECTRIC CARS-SOLAR ENERGY
EXTEND PUBLIC TRANSPORTATION USE TO LATER HOURS
FEELING SAFER ON PUBLIC TRANSPORTATION W/CHILDREN
FINES FOR BIG INDUSTRIES/CAR POOL LANES ON MAJOR ROAD
FOCUS MORE ON THE COMPANIES THAT CREATE POLLUTION
GOVERNMENT REGULATION
HARD TO RIDE A BIKE-NEED MORE SIDEWALKS
HEALTH ISSUES
HEALTH FACTORS
HEALTH RISKS
I AM UNTROUBLED BY THE AIR INSIDE OR OUTSIDE
I HAVE NO IDEA

StatPac For Windows

Q17. What other factors not mentioned here would motivate you to help reduce air pollution?

Q17 Would motivate

IF LAWS WERE FAIRLY APPLIED & ENFORCED
INCREASE OF SUFFERING DUE TO INCREASE OF AIR POLLUTION
INCREASED AVAILABIALITY OF ACTIVIST GROUPS
IT IS NOT A PROBLEM
JUST A WAY TO RAISE TAXES
JUST KNOWING WHAT THINGS HELP-I TRY TO DO MY BEST
KEEPING FAMILY SAFE
KNOWING OTHERS HELPING TO REDUCE POLLUTION
KNOWING THERE IS A PROBLEM WILL MAKE DRAMATIC CHANGE
LAWS ENFORCE GOOD BEHAVIOR FOR CLEAN AIR
LEARN WHAT GOING ON
LESS CHEMICALS THAT SPRAY ARESOLS
LIGHT RAIL
MAJOR FINES ISSUED TO SMOKING VEHICLES
MAKE FLYING CARS THAT ARE BATTERY OPERATED
MASS TRANSIT SYSTEM NEED BETTER MKTG-LIGHT RAIL
MASS TRANSIT TRAINS FOR COMMUTING ALL OVER NATION
MASS TRANSIT-LIGHT RAIL
MASS TRANSPORTATION
MORE NON INTERNAL COMBUSTION ENGINES
MORE RELIABLE CARS
MORE SIDEWALKS-BETTER PUBL TRANSP-NO URBAN SPRAWL
MORE SIDEWALKS-BIKE LANES-TAX CREDITS
MOWING LAWNS LESS
NATIONAL & WORLD MEDIA
NEED TO RECYCLE-TEACH KIDS IMPORTANCE OF AIR QUALITY
NEEDS MORE INFO IN JOB PLACES & SCHOOLS
NEW TECHNOLOGY
NO IDEA RIGHT NOW
NO 18 WHEELERS-24 FT RIGS-ONLY TRAINS
HAVE OZONE GENERATOR IN MY HOME
OFFER MODERN ALTERNATIVES, I.E. RAIL
ORGANIZATIONS THAT HELPED TO ORGANIZE CARPOOLS
PAY NOW TO CONSERVE-CLEAN UP ALL FORM OF POLLUTION
PERSONAL HEALTH & INCOME
PLANT A GARDEN
PLANTING A TREE OR GROWING A GARDEN
POLLUTION HAS NEGATIVE EFFECTS ON PLANTS/ANIMALS
PRETTY MUCH COVERED IT ALL IN THIS LIST
PRICE OF FUEL INCREASED SIGNIFICANTLY

StatPac For Windows

Q17. What other factors not mentioned here would motivate you to help reduce air pollution?

Q17 Would motivate

PRICE OF GAS GOES UP
PROLONG THE LIFE OF THE OZONE LAYER
PROVIDE INFO ABOUT IMPACT ON HEALTH
PUBLIC BUS
PUBLIC TRANSP NEEDS MORE ROUTES TO OUTER CITIES
PUBLIC TRANSPORTAITON-TIME AVAILABLE NEEDS TO BE BETTER
PURCHASING NEW ELEC OR CORN-OIL FUELD CARS
QUIT THE HISTERICS – IT'S NOT THAT BAD
RAIL SYSTEM-EDUCATE DRIVERS FOR BUSINESS COMMUTERS
RAISE THE PRICE OF GAS; ACCESS TO SOLAR/WIND ENERGY
REDUCE DEPENDENCE ON FOSSIL FUEL-ALTERNATIVE ENGER
REDUCE NUMBER OF SUV/TRUCKS THAT CLOG RDWY/POLLUTE
REDUCING AIR POLLUTION & PRESERVING THE OZONE LAYE
REGULAR REMINDERS/KNOWLEDGE OF WHAT TO DO & WHEN
REQUIRE VEHICLE EMMISSIONS TESTING
RIDE A MOTORCYCLE
SAFE FOR MY KIDS
SAFETY OF OTHER PEOPLE IN THE FUTURE
SAVE FOR FUTURE GENERATIONS
SERIOUS HEALTH RISKS
SET HUGE CAMPAIGN TO TELL PEOPLE ABOUT THE ISSUE
SHOWING AIR QUALITY WORSENING IN LAST 5-10 YEARS
SMOKING
SOME KIND OF INCENTIVE
STOP PEOPLE FROM SMOKING
STOP BURNING LEAVES
STOP SMOKING
STRICTER RESTRICTIONS ON BIG COMPANIES
SUBWAY TYPE OF PUBLIC TRANSP SVC-LIGHT RAIL
TAX BREAKS
TAX INCENTIVES
TRUCKS DRIVING THROUGH NEIGHBORHOODS
WALK MORE
WHATS THE USE - FEDS KEEP SHOOTING HOLES IN OZONE LAYER
WORKD IN YELLOWSTONE PARK-NEED TO WEAR GAS MASK HERE
WORK ON GROUND POLLUTION AS WELL

Q18. Have you heard about the Gas Cap Giveaway/Gas Cap Replacement program?

Q18 Head about Gas Cap Giveaway/GCP prgm	Number	Percent
1=yes	119	18.4 %
2=no	527	81.6 %
Total	646	100.0 %

Q18. [IF YES] Did you participate?

Q18 If yes did you participate	Number	Percent
1=yes	17	14.3 %
2=no	102	85.7 %
Total	119	100.0 %

Q18. [If YES] How did you hear about the Gas Cap Giveaway/Gas Cap Replacement program? (multiple responses allowed)

Q18b How did you hear about Gas Cap	Number	Percent
0 = none chosen	4	3.4 %
1 = ad KC Star	30	25.2 %
2 = ad other newspaper	8	6.7 %
3 = article KC Star	20	16.8 %
4 = TV news item	56	47.1 %
5 = Quick Trip poster	21	17.6 %
6 = Quick Trip gas cap testing event	2	1.7 %
7 = Jiffy Lube poster	3	2.5 %
8 = O'Reilly Auto poster	7	5.9 %
9 = other	15	12.6 %
Total	166	

Q19. Have you heard about the Kansas City Clean Air Pledge (KCCAP)?

Q19 Heard about KC Clean Air Pledge	Number	Percent
1=yes	54	8.4 %
2=no	592	91.6 %
Total	646	100.0 %

Q19. [IF YES] Did you participate?

Q19a Did you participate	Number	Percent
1=yes	15	27.8 %
2=no	39	72.2 %
Total	54	100.0 %

Q19. [If Yes] How did you hear about the Kansas City Clean Air Pledge? (multiple responses allowed)

Q19b How did you hear about KCCAP	Number	Percent
ADVERTISEMENTS=	1	3.4 %
BROCHURES=	3	10.3 %
CHURCH=	4	13.8 %
FRIENDS=	3	10.3 %
HUSBAND=	1	3.4 %
KC STAR INSERT=	1	3.4 %
MAILER=	1	3.4 %
MTV=	2	6.9 %
NEWS=	2	6.9 %
PAPER=	1	3.4 %
RADIO=	2	6.9 %
SEMINARS=	1	3.4 %
SIDE OF BUS=	1	3.4 %
TV=	4	13.8 %
WORK=	2	6.9 %
Total	29	100.0 %

Q20. What is your age?

Q20 What is your age	Number	Percent
1=18-24 years	59	9.1 %
2=25-34 years	129	20.0 %
3=35-44 years	115	17.8 %
4=45-54 years	142	22.0 %
5=55-64 years	92	14.2 %
6=65 + years	104	16.1 %
9=not provided	5	0.8 %
Total	646	100.0 %

Q21. Approximately how far do you travel to work?

Q21 Approx how far do you travel to work	Number	Percent
1=not employed	157	24.3 %
2=less than 5 miles	116	18.0 %
3=5-10 miles	128	19.8 %
4=11-15 miles	76	11.8 %
5=16-20 miles	75	11.6 %
6=21-30 miles	50	7.7 %
7=more than 30 miles	33	5.1 %
9=don't know	11	1.7 %
Total	646	100.0 %

Q22. How many cars, trucks, vans or SUV's are in your household?

Mean Number of Vehicles Per Household By Vehicle Type

	Mean	Total	Sum
Q22 Number of Cars in household	1.29	645	834
Q22 Trucks	0.33	644	215
Q22 Vans	0.15	644	98
Q22 SUV	0.26	644	165
Total Vehicles Per Household	2.03		

Q23. What county do you live in?

Q23 What county do you live in	Number	Percent
1=Clay	86	13.3 %
2=Jackson	227	35.1 %
3=Johnson KS	185	28.6 %
4=Platte	50	7.7 %
5=Wyandotte	92	14.2 %
9=not provided	6	1.0 %
Total	646	100.0 %

Q24. Would you say your total annual household income is:

Q24 Total annual household income	Number	Percent
1=Under $20,000	73	11.3 %
2=$20,000-49,999	204	31.6 %
3=$50,000-74,999	133	20.6 %
4=$75,000 +	164	25.4 %
9=not provided	72	11.1 %
Total	646	100.0 %

Q25. Your gender.

Q25 Respondents gender	Number	Percent
1=male	302	46.7 %
2=female	344	53.3 %
Total	646	100.0 %

Q26. Would you be interested in participating in a focus group or other discussion about air quality in Kansas City sometime in the future?

Q26 Interested in focus group discussion	Number	Percent
1=yes	124	19.2 %
2=no	518	80.2 %
9=don't know	4	0.6 %
Total	646	100.0 %

Q27. Would you be interested in receiving an e-mail message that notifies you when it is an OZONE ALERT day?

Q27 Interested in E-mail notification	Number	Percent
1=yes	95	14.7 %
2=no	550	85.1 %
9=don't know	1	0.2 %
Total	646	100.0 %

Ozone Alert Day Survey
Executive Summary

Mid-America Regional Council (MARC) conducted a survey of residents in the Kansas City area to measure awareness of Ozone Alert days and to assess the impact that Ozone Alert days are having on the behavior of residents in the region. The survey was administered on three Ozone Alert days during the summer of 2002 between the hours of 4:00-9:00 p.m. The three days were July 9, July 30, and September 6.

The survey was administered by phone to a random sample of at least 200 persons on each date. The Kansas City area was defined as the five county area of Johnson and Wyandotte Counties in Kansas and Jackson, Clay, and Platte Counties in Missouri. The survey results for each date have a 95% level of confidence with a precision of at least +/-6.8%.

Major Findings

- 85.2% of those surveyed were familiar with the term "Ozone Alert." Altogether 91.7% of those surveyed were familiar the term "Ozone Alert" or another term, such as "Red Alert" or "Orange Alert."

- The average number of adults in the Kansas City area who were familiar with the term Ozone Alert or another term, such as Red Alert," was approximately 1,008,956 adults (91.7% of 1.1 million adults in the region).

- On average, an estimated 615,463 adults (61.0% of 1,008,956 adults who were familiar with the term Ozone Alert or a similar term) knew when it was an "Ozone Alert" day during the summer of 2002. In 2001, it was estimated that 609,211 adults knew when it was an "Ozone Alert" day.

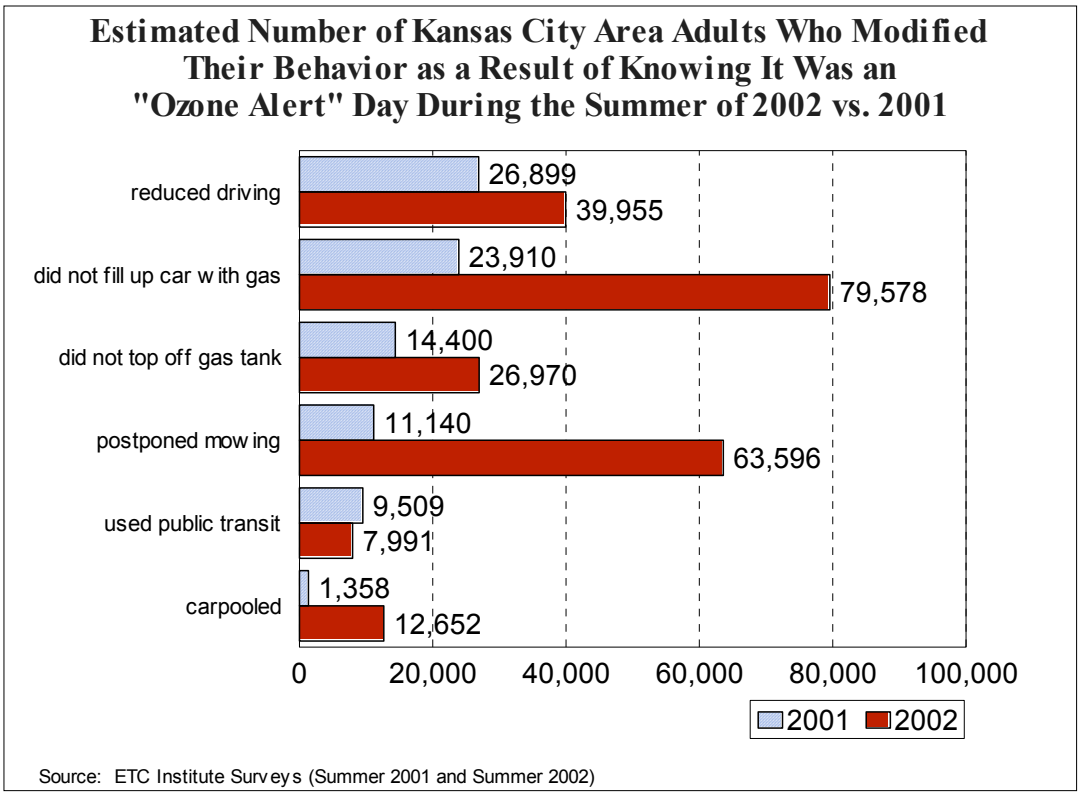
- ***During the summer of 2002, an average of 332,965 adults in the Kansas City area modified their behavior*** on "Ozone Alert" days to help reduce air pollution in the metropolitan Kansas City area (54.1% of the 615,463 adults who knew it was an Ozone Alert day). In 2001, it was estimated that 271,708 adults modified their behavior.

- ***Ozone Alert days prompted a slight increase in public transit usage. 2.4%*** of those surveyed who knew it was an "Ozone Alert" day indicated that they used public transit as a result of knowing it was an Ozone Alert day.

- ***64% of those surveyed who knew it was an Ozone Alert day were informed by morning television.*** Other major sources of information about "Ozone Alert" days were evening television (37%) and radio (14%).

- ***Thousands of Kansas City area residents drove less on Ozone Alert days.*** The average number of adults in the Kansas City area who drove less as a result of knowing it was an Ozone Alert was approximately 39,955 adults during the summer of 2002 (12.0% of 332,965 adults who did something differently as a result of knowing it was an Ozone Alert day). This was up significantly from 2001 when it was estimated that 26,899 adults typically drove less on "Ozone Alert" days.

- If the average person who drove less as a result of knowing it was an Ozone Alert day had reduced their total driving time by just ten minutes, the total number of hours that people drove in the Kansas City area would have been reduced by an average of more than 6,600 hours (39,955 persons x 10 minutes/60) on each "Ozone Alert" day.



Question 1: Have you ever heard of the phrase OZONE ALERT used to describe air quality conditions in the Kansas City Area?

N=688	Day			Total
	Jul 9	Jul 30	Sep 6	
Q1 Have you heard of OZONE ALERT				
Yes	86.3%	86.1%	82.8%	85.2%
No	13.7%	13.9%	17.2%	14.8%

Question 1a: [If NO to Question 1] Have you ever heard of the phrase RED ALERT or ORANGE/RED DAY used to describe air quality conditions in the Kansas City Area?

N=102	Day			Total
	Jul 9	Jul 30	Sep 6	
Q1a Heard of RED ALERT/ORANGE/RED DAY				
Yes	50.0%	40.0%	42.4%	44.0%
No	50.0%	60.0%	57.6%	56.0%

Question 2: [If YES to Question 1 or Question 1a] Did you know that today was an OZONE ALERT day in the Kansas City area?

N=630	Day			Total
	Jul 9	Jul 30	Sep 6	
Q2 Did you know today was OZONE ALERT				
Yes	76.0%	56.3%	48.9%	61.0%
No	24.0%	43.7%	51.1%	39.0%

Question 3: [If YES to Question 2] How did you find out that it was an OZONE ALERT day?
(multiple responses allowed)

Q3 How did you find out-OZONE ALERT day	Number	Percent
1 = newspaper	28	7.3 %
2 = radio	55	14.3 %
3 = morning TV	246	64.1 %
4 = evening TV	140	36.5 %
5 = work/school	10	2.6 %
6 = other	24	6.3 %
Total	503	

Question 4: Did you do anything differently today as a result of knowing that it was an OZONE ALERT day?

N=630	Day			Total
	Jul 9	Jul 30	Sep 6	
Q4 Do anything different today				
yes	63.6%	47.7%	46.2%	54.1%
No	36.4%	52.3%	53.8%	45.9%

Question 4a:[IF YES to question #4] What did you do? (multiple responses allowed)

Q4a If yes what did you do	Number	Percent
0 = other	9	4.3 %
1 = carpooled	8	3.8 %
2 = postponed mowing	40	19.1 %
3 = did not use lighter fluid	3	1.4 %
4 = did not fill gas tank	50	23.9 %
5 = did not top off gas tank	17	8.1 %
6 = used public transportation	5	2.4 %
7 = rode bike/walked	1	0.5 %
8 = reduced driving	25	12.0 %
9 = stayed inside	134	64.1 %
Total	292	

Question 5: What is your age?

N=688	Day			Total
	Jul 9	Jul 30	Sep 6	
Q5 Respondents age				
18-24	12.4%	9.9%	9.9%	10.8%
25-34	8.2%	16.3%	10.8%	11.9%
35-44	19.7%	17.1%	12.8%	16.7%
45-54	18.5%	19.0%	15.8%	17.9%
55-64	12.0%	15.1%	16.3%	14.4%
65+	27.5%	20.2%	26.1%	24.4%
Not provided	1.7%	2.4%	8.4%	3.9%

Question 6: What county do you live in?

N=688	Day			Total
	Jul 9	Jul 30	Sep 6	
Q6 County live in				
Clay	8.6%	11.9%	12.3%	10.9%
Jackson	46.4%	37.7%	42.9%	42.2%
Johnson KS	27.5%	34.5%	29.1%	30.5%
Platte	8.2%	6.3%	5.4%	6.7%
Wyandotte	9.0%	9.5%	10.3%	9.6%
Not provided	0.4%	0.0%	0.0%	0.1%

Question 7: Respondent's gender

N=688	Day			Total
	Jul 9	Jul 30	Sep 6	
Q7 Respondents gender				
male	50.2%	49.2%	46.3%	48.7%
female	49.8%	50.8%	53.7%	51.3%